

**BEFORE THE HON'BLE NATIONAL GREEN
TRIBUNAL, WESTERN ZONE BENCH AT PUNE**

APPEAL NO OF 2023 [WZ]

BETWEEN:

PRAVINSINGH ARJUN SHEDGAONKAR AND ORS.

...APPELLANTS

AND

**THE GOA STATE ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY AND ORS.**

...RESPONDENTS

PLACE: Mapusa, Goa

DATE: 29th November 2023

ADVOCATE FOR APPELLANTS


29.11.2023

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SYNOPSIS AND CHRONOLOGY OF DATES AND EVENTS

The Appellants *vide* this Appeal impugn the Environmental Clearance dated 28th August 2023 issued by the Resp No. 1 [*S.E.I.A.A.*, Goa] to the Resp No. 2 [*Delta Corp. Ltd.*] for construction of 'Deltin Town' -- an Integrated Resort Complex Project in Dhargalim Village, Pernem Taluka, North Goa District, Goa, which comprises a resort including Hotel, Convention Centre, Retail, Cinemas, Multi-Level Car Parking, Water Park and related amenities. The built-up area involved is approximately 3.26 Lakh sq. mts. (3,26,391.30 sq. mts.). The impugned E.C. is challenged *inter alia* on the grounds the proposal could not have been appraised and granted an E.C. for the category 8(b) pertaining to 'Townships and Area Development Projects', as it does not qualify under this Category as per definitions contained in the published Manual/Guidelines of the Ministry of Environment, Forest and Climate Change. The Appellants are also aggrieved by the omission of information and/or misleading/incorrect information supplied by the Project Proponent in the Form-I and other documents, which adversely

affects the application of mind and decision making process of the Goa S.E.I.A.A; and the fact that the T.O.R.s pertaining to the project were seemingly amended to accommodate the Baseline Study carried out by the P.P. almost a year earlier. This Appeal also raises the important issue that the R. 1 Authority has not adequately considered the impact of this massive project on the ground water resources and waste management capabilities of Pernem Taluka. The area of the Project in question will more than triple the entire built up area of the Dhargalim village, where the project is located. Sixteen villages fall within the 5 km radius of the project location and are spread across two Talukas in the North Goa district. Even within these minimal parameters, the impact of the project would be so overwhelming that without a public consultation, people's environments and everyday lives could be indelibly affected. For all these reasons, the instant Appeal has been preferred before this Hon'ble Tribunal.

CHRONOLOGY OF DATES AND EVENTS

Sr. No.	Date	Particulars of Events or Documents if any	Annexure and Page
1.	03.03.22 – 05.05.22	Baseline studies of Core and Buffer areas of Project carried out by P.P.	Ann. 15 , at pgs. 237 - 242
2.	28 th Apr. 2022	Application filed by P.P. for grant of TOR for the E.I.A study.	Ann 16 , at pgs. 243
3.	1 st June 2022	Goa State Environmental Appraisal Committee in its 151 st meeting decides to recommend grant of TOR	Ann 17 , at pgs. 244 - 246
4.	13 th June 2022	Goa State Environment Impact Assessment Authority/G.S.E.I.A.A. in its 80 th meeting decides to grant TOR for the project	Ann 18 , at pgs. 247 - 255
5.	17 th June 2022	G.S.E.I.A.A. grants TOR to P.P.	

6.	29 th Nov. 2022	P.P. makes 1 st application for amendment of T.O.R	
7.	16 th Dec. 2022	1 st Amendment in T.O.R. approved	
8.	10 th Jan. 2023	P.P. makes 2 nd application for amendment of T.O.R	
9.	18 th Jan. 2023	GSEAC in its 169 th Meeting recommends for allowing amendment to TOR	
10.	1 st Feb. 2023	G.S.E.I.A.A. decided to permit amendment of TOR again	
11.	10 th Feb. 2023	2 nd Amendment of T.O.R. approved	Ann. 19 , at pg. 256
12.	16 th May 2023	P.P. files Application for grant of E.C. for Integrated Resort Complex project 'Deltin Town'	
13.	9 th June 2023	GSEAC in its 180 th meeting recommends grant of Prior EC	
14.	28 th July 2023	GSEIAA in its 109 th meeting decides to grant E.C. for project with general and specific conditions	
15.	28 th August 2023	EC granted to Project Proponent by Resp. No. 1/ GSEIAA	Ann. 1 , at pgs. 37 - 50
16.	2 nd September 2023	Notice of grant of E.C. along with E.C. published in the 'Times of India' newspaper	
17.	29 th November 2023	Present Appeal is filed along with separate I.A. for condonation of Delay	

PLACE: MAPUSA, GOA

DATE: 29.11.2023


29.11.2023

Adv. for the Appellants

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Compilation – I

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PLACE: Mapusa, Goa

DATE: 29th November 2023


29.11.2023

ADVOCATE FOR APPELLANTS

Adv. Om D'costa,

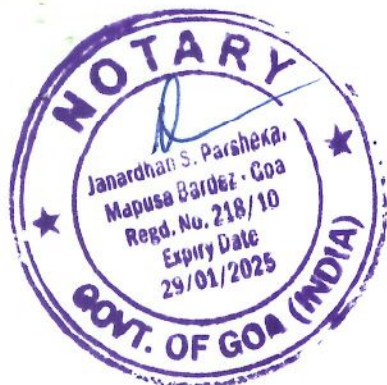
MAH/11676/2021,

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**BEFORE THE HON'BLE NATIONAL GREEN
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APPEAL NO OF 2023 [WZ]

(Under Section 18(1) read with Sections 16
and 17 of the National Green Tribunal Act, 2010)

BETWEEN:

1. PRAVINSINGH ARJUN SHEDGAONKAR,

Age 39 years, Indian national,
r/o H. No. 1615/2, Satyabhama Krishna Walkeshwar Wada,
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2. SWATI NHANU MORAJKAR,

Age 41 years, Indian national,
r/o H. No. 710/60, Chonwada, Dhargal,
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3. GAJANAN DATTARAM GADEKAR,

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4. SHOUNAK RAJAN KORGAONKAR,

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....APPELLANTS

AND

1. THE GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (SEIAA),
through its Member Secretary,
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4th Floor, Dempo Towers, Patto, Panaji, Goa – 403001.
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2. DELTA CORP LIMITED,
Thr. its Manager,
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C/o Delta Pleasure Cruise Company Private Limited,
Fisheries Department Building, Ground Floor,
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Email id: - premanand0895@gmail.com,
Contact No. - 8080489493.

3. THE STATE OF GOA,
through its Chief Secretary,
c/o Secretariat,
Porvorim, Goa - 403521,
Email id: cs-go@nic.in,
Contact No. - 0832-2419402.



4. THE MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE,
through its Secretary, Indira Paryavaran Bhavan,
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Email id – mefcc@gov.in,
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...RESPONDENTS

[Above are all registered addresses of the parties]

THIS APPEAL MOST RESPECTFULLY SHOWETH:-

1. The address of the Appellants' counsel is given below for the service of notices of this Appeal.
2. The addresses of the Respondents are given above for the service of notices of this Appeal.
3. The Appellants by the present appeal seek to challenge the environmental clearance dated 28th August 2023 issued by the Resp No. 1 [S.E.I.A.A., Goa] to the Resp No. 2 [Delta Corp. Ltd.] for construction of 'Deltin Town' - an Integrated Resort Complex Project ["the I.R.C Project"] on Sy. Nos. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A, 280/1-B of Dhargalim Village, Pernem Taluka, North Goa District, Goa. A Copy of the impugned E.C. dt. 28.08.2023 is enclosed at Annexure 1.
4. The said E.C. is challenged on the following principal grounds, among others:
 - a) The Resp No. 1 (SEIAA) has not applied its mind and has incorrectly appraised the the project for granting of environmental clearance under the Category of 'Township and Area Development Project' [Item 8(b), Schedule to EIA Notification] when the proposal itself discloses in its details that it is not a township and it does not fall within the guidelines for Township and Area Development published by the Ministry of Environment, Forest and Climate Change in the year 2010.



- b) The grant of the impugned E.C. also suffers from non-application of mind in respect of the conditions imposed by the Resp. No.1 (SEIAA) on the project proponent in respect of the gross negative impacts of the project on the environment of Dhargal village in which it is located and on Pernem and other neighbouring talukas.
- c) The Respondent No.2 (Delta Corp Ltd.) has provided incorrect and misleading information to the Resp. No.1 in order to procure the impugned EC, which goes to the root of the decision making process and has resulted in the absence of consideration of important socio-ecological factors in the EIA and Appraisal process.
- d) The Resp. No.1 (SEIAA) has not considered the Resp No 2's project objectively. After issuing the TORs for the project, Resp. No.1 has modified the TORs at the request of the project proponent (Resp.No.2) in respect of studies already prepared by the P.P., indicating thereby that it is the P.P who was determining the assessment of the project and not the SEIAA. This is not permissible by law.



QUESTIONS FOR DETERMINATION IN THIS APPEAL

- I. Whether the appraisal and grant of E.C. by the S.E.I.A.A./ Resp. No.1 under category 8(b) of the EIA Notification 2006 is in accordance with law?
- II. Whether the S.E.I.A.A. in granting the environmental clearance has comprehensively examined the cumulative

and large scale impact of the project on the natural and social environment?

- III. Whether the project proponent has correctly and completely supplied information to the R. 1 in the Form - I and supporting documents?
- IV. Whether a public consultation ought to have been held prior to grant of E.C., considering the massive extent and scale of the project and its impact on the people and the environment of the village?
- V. Whether the Environmental Impact Assessment Study was carried out in accordance with extant EIA Guidelines, specifically pertaining to the timing of the Terms of Reference (TOR) and Study of the Baseline Situation?

FACTS OF THIS CASE:

5. A brief factual matrix of the project for which the impugned E.C. has been granted is stated hereinbelow.
6. The 'Deltin Town' project in question for which an E.C. has been accorded is in the nature of an Integrated Resort Complex, which comprises a resort including Hotel, Convention Centre, Retail, Cinemas, Multi-Level Car Parking, Water Park and related amenities. The built-up area involved is approximately 3.26 Lakh sq. mts. (3,26,391.30 sq. mts.), located in Dhargalim village, Pernem Taluka, North Goa.



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7. During the operational phase of the project, the maximum occupancy [*including staff, workers and guests et al.*] is stated to be 45,161 people. The scope and scale of the project may also be understood from a comparison between population estimates. The entire 2021 population of Dhargalim Village, wherein the project is to be located as per the Census of India 2011, is a mere 5,696. Pernem Taluka which comprises 21 village panchayats and 1 municipality has a population of 75,747. For reference, the largest population centre in the whole of adjoining Bardez Taluka is Mapusa, with a population (as of 2011) of 39,989.
8. The project proponent [*Resp. No. 2*] filed an Application for grant of T.O.R. for EC on 28th April 2022, for which purpose T.O.R. was granted on 17th June 2022. Prior to grant of T.O.R, baseline studies had been completed by the P.P. in the time period March - May 2022. The approved T.O.R. came to be amended two times, with the latest T.O.R. being on 10th February 2023. An Application for grant of E.C. was made on 16th May 2023, which was recommended for approval by the Goa SEAC on 09th June 2023. The Resp. No. 1 SEIAA decided to grant EC on 28th July 2023, following which the impugned EC was issued on 28th August 2023. Notice of the grant of EC was published in local newspapers on 2nd September 2023.



Issue No. 1: Whether the Resp. No.1 has applied its mind and correctly appraised the project under 8(b) of the EIA Notification 2006?

9. In the instant case, the Resort Complex project in question has been appraised and considered by the S.E.I.A.A. in the Category of 'Townships and Area Development Projects', as per Item No. 8(b) of the Schedule to the E.I.A.

Notification, 2006, which deals with 'Townships and Area Development projects...', covering an area of $\geq 1,50,000$ sq. mtrs. of built-up area and/or covering an area ≥ 50 ha. Projects under this Category are to be appraised as 'B1' Category projects.

10. The Ministry of Environment, Forests and Climate Change [Resp. No. 4] has issued Sector Specific Manuals from time to time *inter alia* to aid SEIAAs and SEACs in appraising applications for E.C.s, and standardise such appraisal across the Country. Towards this end, the MOEF has issued an E.I.A. Guidance Manual regarding appraisal of Building, Construction, Townships and Area Development Projects for the purposes of the EIA Notification, 2006. An extract of this Manual is enclosed as Annexure 2, and the Appellants crave leave to produce the Entire Manual if required in the course of these proceedings.

11. It is submitted that the decision of the Resp. No. 1 impugned E.C. in appraising the I.R.C project under the 8(b) category has to be tested as against the Guidelines laid down by the Ministry, to determine whether the project qualifies as a 'Township and Area Development project'. It is the Appellants case that the I.R.C. project could not have been appraised as a 'Township and Area Development project' as it does not meet the norms provided in the MOEFCCs EIA Guidance Manual for the same.

12. The M.O.E.F. Manual assigns functional definitions for different project types, which differentiate Category 8(b) from category 8(a), 'Building and Construction projects.' According to the Manual, 'Townships' is defined as follows:

"an integrated development of a contiguous land parcel which contains within itself requisite physical and social infrastructure, with access to off site physical and social infrastructure and fulfils all conditions laid down under this policy.'



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13. "On-site Physical Infrastructure" is defined as "all the on site services such as roads including approach Roads, Street lights, Water supply system, Sewerage system, Storm water drainage system, Electrical Network, Communication Network, Sewage Treatment Plants, Percolation Wells, Solid Waste Disposal system, Common Effluent Treatment Plants (CETP), spaces for Informal Services etc. as provided for in Schedule".
14. "On-site Social Infrastructure" is defined as "all the on site amenities supportive to the resident population as per the prevailing norms such as Nursery, Crèche, Primary school, Composite School, Dispensary, Polyclinic, Community Hall, Library, Convenience Shopping, Playfields, Parks, Police station, Public parking, Bus station, Fire station, Post office etc, EWS Housing for the informal service providers of the Township, all the components necessary to facilitate barrier free accessibility for the Senior citizens and Physically challenged persons as prescribed by the concerned GDCRs and land reservations for social infrastructure requisite on the macroscale to be handed over to the local Authority as may be prescribed by the Authority."
15. The Manual further states that 'Township in general, is self contained and integrated in the social infrastructure needs, services, shopping, entertainment and waste management. Infrastructure and services include road network, water supply and management, electricity supply and management and proper communication services. Social infrastructure includes schools, medicare, recreation and community centre. Shopping centre with adequate facilities should be housed in the township itself. Proper waste management including garbage collection, segregation, treatment and disposal with the township should be provided. Maintenance



of infrastructure and proper security and safety of the residents is to be ensured.”

16. As per this EIA Manual, ‘Townships and Area Development Projects’ are a single category, with no separate treatment of Area Development Project as distinct from Township. Therefore, these definitions and guidelines apply to any project classified under 8(b).
17. The Hon’ble Supreme Court of India in the matter pertaining to Constructions near the Okhla Bird Sanctuary had the occasion to consider the distinction in the nature of Categories 8(a) and 8(b), and its discussion thereon is relevant to the issues raised in this Appeal regarding incorrect appraisal of the IRC Project under Category 8(b). The relevant paragraphs of the judgement [*enclosed at Ann. 3 Colly*] are quoted hereinbelow:

“61. But before considering the latter three limbs of Mr Bhushan's arguments it is necessary to examine whether the project in question can be legitimately categorised as a building and construction project falling under Item 8(a) of the schedule which is the first premise of his arguments. In the schedule to the notification “building and construction projects” and “townships and area development projects” are enumerated separately, the former in Item 8(a) and the latter in Item 8(b). This would normally suggest that the notification treats those two kinds of projects separately and differently. It would, therefore, be reasonable to say that an “area development project” though involving a good deal of construction would yet not be a “building and construction project”.

62. When it was pointed out to Mr Bhushan that the project in question may be put more appropriately in Category 8(b) as an “area development project” rather than a “building and construction project” under



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Category 8(a), in reply he took a line that nullifies any distinction between the two. Mr Bhushan submitted that so far as construction projects are concerned there is no qualitative difference between Items 8(a) and 8(b) and the difference between the two items was only quantitative. Projects were categorised under Items 8(a) or 8(b) as “building and construction projects” or “townships and area development projects” not on the basis of their nature and character but depending upon the extent of construction. The learned counsel pointed out that the upper limit under Item 8(a) (1,50,000 sq m of built-up area) was the threshold mark under Item 8(b) and contended that this was a clear indication that projects with built-up area up to 1,50,000 sq m would be defined as “building and construction projects” and projects with built-up area in excess of 1,50,000 sq m would be categorised as “townships and area development projects”.

63. In support of the contention, Mr Bhushan gave the example of a “building and construction project”, consisting of a number of multi-storied buildings, the aggregate of the built-up area of which exceeds 1,50,000 sq m. Mr Bhushan submitted that since the total built-up area of the project crosses the upper limit of Item 8(a) the project would not fall within that item. But at the same time since the project is a “building and construction project” and not a “township and area development project”, it would not come under Item 8(b) and this would be indeed a highly anomalous position where a project with a smaller built-up area would fall within the ambit of the notification, whereas a project with a larger built-up area would escape the rigours of the notification.

64. The amicus, also arguing in the same vein, submitted that as far as building and construction



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projects are concerned there was no qualitative difference in Items 8(a) and 8(b) of the schedule to the notification. A combined reading of the two clauses of Item 8 of the schedule would show the continuity in the two provisions; 1,50,000 sq m of built-up area that was the upper limit in Item 8(a) was the threshold marker in Item 8(b). This clearly meant that building and construction projects with built-up area/activity area between 20,000 sq m to 1,50,000 sq m would fall in Category 8(a) and projects with built-up area of 1,50,000 sq m or more would fall in Category 8(b). The amicus further submitted that though it was not expressly stated, the expression “built-up area” in Item 8(b) must get the same meaning as in Item 8(a), that is to say, if the construction had facilities open to sky the whole of the “activity area” must be deemed to constitute the “built-up area”.

65. It is extremely difficult to accept the contention that the categorisation under Items 8(a) and 8(b) has no bearing on the nature and character of the project and is based purely on the built-up area. A building and construction project is nothing but addition of structures over the land. A township project is the development of a new area for residential, commercial or industrial use. A township project is different both quantitatively and qualitatively from a mere building and construction project. Further, an area development project may be connected with the township development project and may be its first stage when grounds are cleared, roads and pathways are laid out and provisions are made for drainage, sewage, electricity and telephone lines and the whole range of other civic infrastructure. Or an area development project may be completely independent of any township development project as in case of creating an



artificial lake, or an urban forest or setting up a zoological or botanical park or a recreational, amusement or a theme park.

66. The illustration given by Mr Bhushan may be correct to an extent. Constructions with built-up area in excess of 1,50,000 would be huge by any standard and in that case the project by virtue of sheer magnitude would qualify as township development project. To that limited extent there may be a quantitative correlation between Items 8(a) and 8(b). But it must be realised that the converse of the illustration given by Mr Bhushan may not be true. For example, a project which is by its nature and character an “area development project” would not become a “building and construction project” simply because it falls short of the threshold mark under Item 8(b) but comes within the area specified in Item 8(a). The essential difference between Items 8(a) and 8(b) lies not only in the different magnitudes but in the difference in the nature and character of the projects enumerated thereunder.

67. In light of the above discussion it is difficult to see the project in question as a “building and construction project”. Applying the test of “dominant purpose or dominant nature” of the project or the “common parlance” test i.e how a common person using it and enjoying its facilities would view it, the project can only be categorised under Item 8(b) of the schedule as a township and area development project”. But under that category it does not come up to the threshold marker inasmuch as the total area of the project (33.43 ha) is less than 50 ha and its built-up area even if the hard landscaped area and the covered areas are put together comes to 1,05,544.49 sq m i.e much below the threshold marker of 1,50,000 sq m. The inescapable



conclusion, therefore, is that the project does not fall within the ambit of the EIA Notification S.O 1533(E) dated 14-9-2006. This is not to say that this is the ideal or a very happy outcome but that is how the notification is framed and taking any other view would be doing gross violence to the scheme of the notification.

68. Since it is held that the project does not come within the ambit of the notification, the other three arguments based on the activity area, the application of general condition and the application of the Office Memorandum dated 2-12-2009 become irrelevant and need not be gone into in this case.

18. The above judgment of the Supreme Court was referred to and applied by the Hon'ble NGT in the matter of Vikrant Kumar Tongad v. Delhi Tourism and Transportation Corporation (OA No. 137 of 2014) in the Hon'ble National Green Tribunal (NGT judgment dated 12th February 2015, enclosed as Annexure 3 Colly).
19. These judicial discussions, read with the definitions of 'Township' in the MOEF's Manual, point to the essential role of civic infrastructure in Township and Area Development Projects, while also affirming that the difference between categories 8(a) and 8(b) pertains to the nature and character of the projects and not their size alone. On this basis, and not excluding other grounds, the appellants challenge the assessment of the Proposed Project under category 8(b). There has been no Public Consultation of this project in the EIA, which deprived area residents of their right to participate in the planned development of their environment, a component of their right to life, under Article 21 of the Constitution of India.
20. Category 8(b) projects do not require public consultation, according to the logic of the *EIA Guidelines*, due to their



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presumed role in contributing to civic infrastructure and enhanced amenities to the impacted population. Prima facie, and based on all information presented in the project proponent's *Environmental Impact Assessment and Environment Management Plan Report* (see Annexure 4), the Proposed Project's "nature and character," due to the complete absence of civic infrastructure serving the wider area, are that of a Building and Construction Project, albeit a large one that exceeds the area norms of category 8(a).

21. It is submitted that the IRC Project does not satisfy the definition of a 'Township and Area Development Project', both as per the EIA Manual as well as the *Okhla Bird Sanctuary* judgement of the S.C. This is because the Proposed Project relies entirely on the existing physical infrastructure of the larger area within which it falls (viz. Dhargal Village, Pernem Taluka, Goa state) and proposes no physical or social infrastructure that will serve this area. In fact, as the *Environmental Impact Assessment and Environment Management Plan Report (Ann. 4 Colly)* and the Environmental Clearance (*Annexure 1*) both note, the Proposed Project will place an additional strain on the physical infrastructure of the region in terms of traffic, solid waste disposal, water provisioning, ground water abstraction, rainwater runoff, etc. On this basis, the Proposed Project fails to abide by the functional definition of an Area Development Project. The Appellants crave leave to produce the entire EIA and EMP Reports if required by this Tribunal.



22. On the basis of the Proposed Project's name, 'Deltin Town,' one might presume that it is indeed a 'Township.' However, the project proponent in the *Environmental Impact Assessment and Environment Management Plan Report* (EIA Report hereafter) and supporting documents, is defined as 'an integrated resort complex (IRC) project, comprising of hotels, convention centre, cinemas, water parks and related amenities.' It further (pg. 1) states "An Integrated

Resort Complex (IRC) is a large-scale development that combines a variety of recreational and entertainment options with hotel, dining, and shopping facilities. IRCs are designed to be self-contained destinations that offer a range of activities and experiences for guests.”

23. The IRC Project does not include on-site social infrastructure, as defined by the MoEF *Environmental Impact Assessment Guidance Manual* (2010). Its complete lack of permanent housing and any wider social infrastructure (the only direct benefits described are to “guests”) therefore places it strictly outside the definition of a ‘Township’, as per the EIA Manual as well as the discussion in the S.C. *Okhla Bird Sanctuary* case.
24. The Environmental Clearance granted nonetheless classifies the Proposed Project as category 8(b), as stated in the first paragraph of its approval: “Accordingly, the above Proposal has been screened and appraised under category 8(b), Townships and Area Development Projects on the basis of the documents enclosed with application viz. Form 1, Conceptual plan as well as additional clarifications furnished in response to the observations made by the Goa State Expert Appraisal Committee” (refer Form 1 of *Environmental Clearance Application, Annexure 5*, and *Conceptual Plan of EC Application, Annexure 6*).
25. However, nowhere in these documents is a basis given for the classification of the project as a ‘Township’ as per the EIA Manual, which is a clear indicator of the non-application of mind by the Goa SEIAA. The R.1 appears to have classified the project as a ‘Township’ purely on the basis of the area involved, which practice was disapproved by the Hon’ble S.C. in the *Okhla Bird Sanctuary* judgment.
26. The question of whether a building and construction project can be termed a ‘Township’ merely on the P.P. describing it as such came up for consideration in a recent judgement dt.



11th September 2023 of the Hon'ble National Green Tribunal [Southern Zone] in the matter of Shaji A.K. vs. Ministry of Environment, Forest and Climate Change.

27. In this matter, the project in question consisted of two residential towers (210) units, studio apartment (204 unit), Business park, 70 key hotel with restaurant facility and 500 pax convention centre and a club house. The total plot area of the project was 3.309 Hectares and the total built-up area was 81,589 Square Meters. An Application for Environment Clearance was made for a Mixed-use Township Development Project, Landmark Trade Centre, which was appraised under Category 8(a), to which an E.C. was granted by the Kerala S.E.I.A.A.
28. The EC so granted was challenged in Appeal before the N.G.T. [SZ], primarily on the ground that the P.P. had already completed 90% of construction before the E.C. was obtained. The project proponent took the defence that the project was 'Township' under 8(b), and not a Building and Construction project under 8(a). Rejecting this argument, the NGT observed that "42. Merely naming a project as a Mixed-use Township Project" will not make it a project under Item 8 (b). If the contention of the project proponent is accepted, it will be open for any project proponent to name their project as "Township" and propose a built-up area that is just less than 1,50,000 Square Meters and claim that prior Environmental Clearance is not required.....".

Issue No. 2: Whether the environmental clearance has comprehensively examined the cumulative and large scale impact of the project on the natural and social environment?

29. The Appellants submit that the R. 1 in granting the impugned E.C. has not considered the impact and real life



implications of the requirements of Natural/Man-Made resources for the I.R.C. project, especially water.

30. The EIA Report fails to consider the summative effects of the project's massive fresh water demand during construction and operational phases on the water resources of the Pernem Taluka, the North Goa District more broadly, and the state of Goa as a whole. The combined water demand for the entire Pernem Taluka in 2022-2023 was 26 mega-litres daily (MLD). That same year, Pernem Taluka experienced a 12 MLD shortage, meaning 14 MLD was the actual total water supply in Pernem Taluka. During construction, the EIA Report (*Annexure 4*) states the Proposed Project will have a 0.432 MLD fresh/potable water tanker demand. During the project's operational phase, the Proposed Project has a first-time demand for 22.76 MLD (almost equaling the entire taluka's daily demand) and a recurring demand of 4.494 MLD, of which 2.551 MLD are 'to be met through water tankers & Govt. Supply (if made available).' This is 9.8% of the entire Pernem Taluka's water demand, and 18% of the entire taluka's actual water delivery. The EIA Report makes no indication of the summative effects of this on the Taluka's scarce water resources, specifically the source of the water. It further furnishes no certificate from the Ground Water Board or indication from the Water Resources Department of the location/source from which surplus water can be obtained (refer to Table 5 on page 15 and Page 17 of EIA Report, *Annexure 4*).



31. The impugned E.C. provides no mitigating measures or correctives during the construction phase beyond the requirement to use "pre-mixed concrete, curing agents and other best practices referred" (*General Conditions 1.r*). It envisions water during the operational phase coming entirely from ground water abstraction (see *General*

Condition 3.i.) and water tankers, yet fails to seek input from the Ground Water Board on the availability of groundwater in the study region. Under “Specific Conditions during post-construction phase,” condition 4.ao. notes: “The source of water is proposed to be water tankers carrying water in the vicinity of 10-12 km from the project site.” Though the Project Proponent, in its reply to item 2.4, Form 1, states that its usage of Sewage Treatment Plant (STP) treated water is for “flushing and gardening,” the EC in specific condition 4.f. says STP water may be used for “Laundry.” STP treated water is never used for laundry, and the EC’s additional unwarranted granting of STP water for this purpose is illogical.

32. The source of water i.e tankers grossly overvalues the availability of both fresh water in the EIA study area and the availability of registered water tankers with the Water Resources Department, of which there are only 34 in the entire Pernem Taluka and 248 in neighbouring Bardez Taluka (*refer Unstarred LAQ No.093 of July 2023, Annexure 7*).
33. It is submitted that denying those residing within 10-12 km of the project the opportunity to provide input on whether their scarce water may be allocated to the Proposed Project deprives them of their fundamental rights guaranteed to them under Article 21 of the Constitution of India.
34. Similarly, the EC has not considered the impact and real life implications of the requirements for disposal of the solid/municipal wastes generated by the project. The EC does not consider adequately the capacity or means by which the local authorities are to dispose of such wastes generated by the Proposed Project.



35. For example, during the construction phase, the Proposed Project's estimated quantity of total municipal waste is 1019 kg/day, of which 407.6 is bio-degradable municipal waste and 611.4 is non-bio-degradable municipal waste. This 611.4 kg/day is to be given to recyclers, but there is no indication that the local authorities and recyclers are prepared to handle this influx. The same holds true for the question of how 1680 litres/annum of Hazardous Waste is to be handled. Additionally, an estimated 71,502 cu. meters of cut soil is sought to be disposed of to various road contractors, but the traffic and environmental burden of this removal is not considered in the EC. Further, despite reporting this quantum of cut soil to be disposed of, in response to question 1.6 of the Checklist of Environmental Impacts, submitted as Appendix II, Form-1 A of the EIA application (*Annexure 5*) – "What are the quantities of earthwork involved in the construction activity cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.)" – the Project Proponent replies "No." This appears to be inconsistent with the same EIA application, yet the Resp. No. 1 did not query this inconsistency.



36. During the Operational phase, non-biodegradable waste shoots up to 5818.8 kg/day and hazardous waste increases to 5600 litres/annum. The same question of the capacity and means for local disposal are not contemplated by the EC. Cut soil of 71,502 cu. meters is sought to be disposed of to various road contractors in the Operational phase as well, with no study of the impacts of soil removal (refer General Conditions 3.c-e and 3.g of *Annexure 1* for details).

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Issue No. 3: Whether the project proponent has correctly and completely supplied information to the R. 1 in the Form - I and supporting documents?

37. In the Form 1 of the EC application (*Annexure 5*), paragraph 1.1 asks, “Will the existing land use get significantly altered from the project that is not consistent with the surroundings? (Proposed land use must conform to the approved Master Plan / Development Plan of the area. Change of land use if any and the statutory approval from the competent authority are submitted).” The Proposed Project simply replies: “Approval from IPB is obtained.” IPB approval, as noted in paragraph 1.1 cited above, does not stand in for or replace conformance with the “approved Master Plan/Development Plan,” which in the present case is the Regional Plan 2021 (RP2021).

38. The land use of the areas tallied in the EIA Report (*Annexure 4*) do not align with those of the DSLR, RP2021, or Tillari Irrigation Project (TIP) Notification, 2015 (*Annexure 8*). The EIA Report, in chapter 3.1.2., states that the “The project land is not under any agricultural cultivation,” despite the above-listed Reports’ simultaneous declaration that all survey numbers are ‘Dry crop’ or ‘Garden’ ‘Types of Land,’ and despite the observation from the Town and Country Planning Department’s Landuse/Zoning Certificate, dated 1st September 2020, for the Proposed Project (*Annexure 9*) that Survey Nos. 264/1 and 267/1 showing the areas as ‘Orchard/Irrigation Command Areas’ as per R.P. 2021.

39. An area of 111.50 km², which accounts for 35.31% of the study area, is falsely classified as ‘Wasteland’ in the Final EIA Report (see Figure 27 and Table 17 on pgs. 22-3). As per the *EIA Guidance Manual* (2010) [*Ann. 2*], ‘Plantations’



are to be tabulated as 'Agricultural Land.' The EIA Report's misrepresentation of the Land Use category of the study area leads it to declare 'No Socio-ecological Impact,' 'Since the Project is not used for cultivation of any crop.' However, the fact that the Project area falls within the irrigation command area of CADA proves that this claim is contrary to the available official records. The Project Proponent's reply to item 1.3 of Form 1 (impacts on existing facilities adjacent to proposed site) further misrepresents the Proposed Project's environmental impact by saying "No impacts are envisaged," when the extensive modifications of existing irrigation canals (shifting and realigning) clearly represent "impacts of the proposed activity on the existing facilities adjacent to the proposed site."

40. The Water Resources Department (WRD), in its submission to the IPB with reference to the project proposal, had clearly stated that the entire parcel of land is cultivable under the irrigation command area, and should not be considered for the Project (*see WRD's letter to IPB dated 11th December 2020, Annexure 10*). This clearly indicates that there is a deliberate attempt to change/convert agricultural land for non-agricultural purposes, thereby defeating the Govt. of Goa's plans to develop agriculture lands by putting them under Command Areas of Irrigation Projects (TIP notification, 2015).



41. The Project Proponent's reply of "No" to item 1.5, Form 1 – "Will the proposal involve alteration of natural drainage systems?" – misrepresents the fact that there is an existing natural storm water drain/Nallah mentioned in the Town and Country Planning Department Zoning Certificate (*Annexure 9*).

Non-existent road shown as Additional Road for Traffic Management

42. As per the Conceptual Plan and Layout Plan submitted under Enclosures 13 and 14 of the EIA Report, and as prepared by Soares and Associates, a 30m-wide road is proposed to Electronic City, Tuem (*See Annexure 5 of EIA Report, Annexure 4*). This is evident in Part B of the EIA application (*Annexure 11*), where, under question 1.17 – ‘New road, rail, or sea traffic during construction or operation?’ – the application reports ‘No’. The so called ‘proposed road’ is not even a part of the Regional Plan 2021, which governs development in the State of Goa. This makes evident that the EIA Report presumes this road, shown on its included Conceptual Plan (page 284 of *Annexure 4*), already exists/is approved, and makes traffic and environmental impact statements on this false basis. This is accepted and approved by the EC conditions 1.w and 4.g, without any verification, which indicates non-application of mind by the R.1.

43. In the P.P.s own EC application, there are discrepancies on how access roads (existing/proposed/to be constructed) for the Proposed Project are represented. The Plan submitted with Form 1 (*see internal page 21*), does not show the 30m-wide Tuem Electronic City Road, whereas the Conceptual Plan (*Annexure 6*) shows this same road.



Inconsistent/incomplete consideration of environmental impacts of traffic associated with project

44. The EC does not consider the number of tankers that will ply the roads throughout the day to supply water to the project. In the water requirement details submitted by the Project Proponent in its EIA Report and support materials, during

construction stage, the source of water is described as 'Water Tankers,' with a project requirement of 648 kilolitres daily (KLD), and the 'Distance from Source in mtr' is listed as '12 kms'. This clearly implies that the water source is off-site, as the project's complete reliance on water tankers indicates. With an average capacity of 5,000 liters and a 432 KLD (max daily) fresh water requirement, this amounts to 87 tanker deliveries daily, or 174 daily one-way trips in and out of the project site. If a 10-hour work day is presumed, that amounts to 17.4 tanker-trips per hour (~1 tanker-trip every 3.5 minutes).

45. The EIA Application is also ambiguous regarding the traffic and related effects of continued reliance on water tankers during the operational phase, when water demands are estimated to soar to 4,494 KLD, and when the EIA Report states (pages 16–17) that 2,551 KLD of fresh/potable water are required via 'water tankers, Government supply (if made available by the time of operation of project), rainwater harvested in rainwater harvesting tanks (during monsoons).' This amounts to 1020 daily one-way trips in and out of the project site, or 102 tanker-trips per hour (presuming a 10-hour day), or 1 tanker-trip every 35 seconds. This amounts to a steady stream of water tankers, nearly two a minute, for ten hours a day, based on the EIA Report's own figures and the Environmental Clearance's statement that "The source of water is proposed to be water tankers carrying water in the vicinity of 10-12 km from the project site" (see Specific Condition 4.ao). Nowhere does the EIA Report's traffic management plan contemplate the impact of tanker trips. This is despite the fact that the GSEIAA – in its 107th meeting (*Annexure 12*), which occurred before the Environmental Clearance was granted – specifically requested (*see item 2.ii*) a study of traffic impact due to water tankers.



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(Note – this report was reviewed during Appellants' office inspection of files at the R1s GSEIAA office. A certified copy has been requested under RTI. There appears to have been some study/plan by the Project Proponent, but this again relies on the presumption of an operational internal, 30-m road which does not exist, and so would be a misrepresentation.)

46. It is submitted that all of these omissions and/or misrepresentations affect the root of the appraisal and decision making process of the R. 1 authority, and this has consistently been followed as a ground to set aside ECs granted in judgements of the Hon'ble N.G.T. The omissions and misrepresentations in this case also satisfy the standard laid down by the Hon'ble Supreme Court of India in Hanumant Laxman Aroskar vs. Union of India and Ors., which is quoted below [*emphasis added*]:

“62. The information provided in Form 1 serves as base upon which the process stipulated under the 2006 Notification rests. An applicant is required to provide all material information stipulated in the form to enable the authorities to formulate comprehensive ToR and enable persons concerned to provide comments and representations at the public consultation stage. The depth of information sought in Form 1 is to enable the authorities to evaluate all possible impacts of the proposed project and provide the applicant an opportunity to address these concerns in the subsequent study. *Missing or misleading information in Form 1 significantly impedes the functioning of the authorities and the process stipulated under the notification. For this reason, any application made or EC granted on the basis of a defective Form 1 is liable to be rejected immediately.*”



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Issue No. 4: Whether a public consultation ought to have been held prior to grant of E.C., considering the massive extent and scale of the project?

47. The whole of Dhargalim village, in which the Project is to be located, consists of 2059.16 hectares of land, with an approximate built up area of 1,500,000 sq. mtrs. Deltin Town, consisting of 3,26,391.30 sq. mtrs of built up area, will more than triple the entire built up area of the village.
48. Sixteen villages fall within the 5 km radius of the project location and are spread across two Talukas in the North Goa district. They include Casnem, Varconda, Cansarvornem, Ozorim, Virnora, Pernem, Dargalim, Tuem in Pernem Taluka; and Pirna, Nandora, Revora, Tivim, Siolim, Oxel, Camurlim and Colvale in Bardez Taluka. Even within these minimal parameters, the impact of the project could be so overwhelming that without a public consultation, people's environments and everyday lives could be indelibly affected. The purpose of an EIA is to assess and acknowledge these environmental impacts. The absence of a Public Consultation denies these sixteen villages their basic right to life.
49. The absence of a Public Consultation belies the purpose of an EIA given the scale of anticipated socio-ecological and demographic impacts. During the Project's Construction phase, 4,000 unskilled/semi-skilled workers are required, with the project's total population rising to a total maximum occupancy of 45,161, as reported in the EIA Report, during the Project's operational phase. Of these, 10,401 will comprise staff. The EIA Report makes no mention of staff housing. The entire 2021 population of Dhargalim Village, as per Census of India 2011, is a mere 5,696, whereas Pernem Taluka has a population of 75,747. For reference, the largest population centre in the whole of adjoining Bardez Taluka is Mapusa, with a population (as of 2011) of



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39,989. The Project 'Deltin Town' proposes to add a population larger than Mapusa's – which would indelibly reshape the fundamental character of the region – with no Public Consultation. The Project Proponent's reply to item 7.1, Form 1 similarly misrepresents the change of demographic structures of the local population when it replies: "The project will result in marginal increase of population resulting in urbanization of the area." A nearly 900% increase in the local population can hardly be considered "marginal," and this too indicates non-application of mind.

50. In response to item 7.3, Form 1 – "Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?" – the Project Proponent's reply of "No" is both misleading and inadequate. Increases in traffic, major demographic changes, strain on existing water and municipal solid waste infrastructure, etc., do indeed represent adverse impacts. Electronic casinos/gaming, a primary function of the Proposed Project, has been shown through peer-reviewed, public health research to be "amongst the most harmful forms of gambling... To reduce the burden of Electronic Gaming Machines on public health, policies to reduce their numbers have recently been introduced in Italy and Finland." (*Annexure 13*). Electronic gambling has been further shown to have direct, adverse impacts on the health of area populations where such facilities are located, with scientific evidence based on comprehensive research in Australia finding that "lower prevalence of play on electronic gaming machines [in the study population] was associated with a corresponding decrease in the gambling problems experienced." (*Annexure 14*). A complete and accurate reply to 7.3 would demonstrate a requirement for Public Consultation on socioeconomic and health grounds.



‘Source of water’ issue

51. The impugned EC, in its ‘Specific Condition’ 4.ao., accepts the fact that the source of fresh water demand for the Proposed Project will be water tankers from the vicinity within 10-12 kms of the Proposed Project site. This would cover parts of Pernem, Bicholim, and Bardez talukas, which are already facing water shortage due to inadequate PWD supply. Added to this, they are already facing the problem of depletion of ground water due to immense existing demand for fresh water, as well as increasing contamination of ground water and insurgence of saline water in the coastal areas.
52. The Appellants have a right to contribute to the planned development of their environment, including the fresh water resources upon which they depend, for any proposed projects which would further put pressure on the availability of water and further deplete the ground water resources upon which they depend. A project of the scale of ‘Deltin Town’ will have an immense impact on the water resources of the surrounding areas and will adversely affect the quality of life of the populace.

Issue No. 5: Whether the Environmental Impact Assessment Study was carried out in accordance with extant EIA Guidelines, specifically pertaining to the timing of the Terms of Reference (TOR) and Study of the Baseline Situation?

53. Appellants state that the EIA Baseline Situation (*Annexure 15*), upon which the EIA Report is based, was studied between 3rd March and 5th May 2022. The Project Proponent made an application to Goa State Environmental Impact Assessment Authority (GSEIAA)/Goa State Expert Appraisal Committee (GSEAC) on 28th April 2022



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(*Annexure 16*), almost at the end of the period of study, for granting Terms of Reference (TOR) for the EIA.

54. On 1st June 2022, in its 151st meeting, GSEAC recommended an 11 point TOR (*Annexure 17*). On 13th June 2022, in its 80th meeting, GSEIAA unanimously took a decision to grant a 9 point TOR (*Annexure 18*), deleting four previously established requirements and adding two new ones. The Project Proponent was granted its TOR on 17th June 2022, more than six weeks after the Baseline Situation had been studied (*see EIA Report, Annexure 4*).

55. Subsequent to this, the Project Proponent made two applications to amend the approved TORs, and on 18th January 2023, in its 169th meeting, GSEAC recommended amendment of the same. On 1st February 2023, in its 96th meeting, GSEIAA decided to grant the TOR amendment requested by Resp.No.2. On 10th February 2023, the TOR was revised retroactively to return to 'standard TOR' so as to fit the terms on which the outdated Study of the Baseline Situation had been done almost a year earlier. Even with the approval of an amended TOR, the EIA requirement is for all baseline studies to take place *after* TOR finalization. This point is affirmed by the GSEIAA letter where it states that the Project Proponent is to initiate EIA study subsequent to TOR approval (*Annexure 19*).



56. This condition has been ignored by the PP, and the study of the baseline situation, carried out almost a year prior to the final TOR approval, has been considered for the final EIA Report submitted along with the application for granting of the EC on 16th May 2023. In spite of the PP's clear defiance of their approval, the GSEIAA has considered this EIA Report and has also granted the EC on 28th August 2023. The

ex-post facto revision to established and approved TORs to suit the specific request of the PP, and the defiance of the chronological rules laid out in the MOEF *EIA Guidance Manual*, is a clear violation of procedural norms for the objective assessment and accurate representation of environmental impacts.

GROUND

57. The Appellants submit that they have made out a fit case for quashing and setting aside the impugned EC granted on the following grounds:

A. The Resp. No.1 could not have categorized the impugned project as a category 8(b) project, as the project details disclosed in the application for EC clearly indicate the project does not fall under category 8(b), as per the MOEF's 2010 *EIA Guidance Manual*. This shows non-application of mind. The project of the Resp. No.2 does not have any public import, but is merely in the nature of a profit making commercial project which does not carry any overtones of a public nature. Neither does it provide any of the functions of a township, and nor does it participate in the public character of a township.



B. The R. 1 in granting the impugned E.C. fails to adequately consider the cumulative and enormous impact of the IRC project on the ground water Resources of Pernem Taluka; North Goa, and the State of Goa as a whole; and the Waste Management system for the waste to be generated during the Construction and Operation of the project.

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C. The omission, inaccurate representation or blatant misrepresentation of information in the Form-I and other documents submitted by the P.P. vitiate the very grant of the E.C., as the entire appraisal and analysis by the SEIAA is adversely affected by such incomplete and inaccurate information, applying the standard laid down in Hanumant Laxman Aroskar vs Union of India.

D. The entire project falls in the agricultural command area of the Tillari Irrigation project. The PP has wrongly indicated in the EIA report that the project does not involve any crop production. An EC cannot be granted which is contrary to a statutory provision of state law. The Goa Irrigation Act does not permit diversion of agricultural areas falling within command areas of irrigation projects to be diverted for non-agricultural purposes.

E. The GSEIAA has no power in law to grant environmental clearance for drawal of groundwater from a radius of 10-12 km around the proposed project site. This would impact thousands of people. Such a condition could not have been imposed without a Public Consultation. The public would need to be consulted on whether they would approve the diversion of their ground water resources for the project at cost of their own consumption and the health of their local environment.



F. The GSEIAA could not have entertained the PP's requests to amend the TORs imposed on the EIA assessment of the project. This squarely indicates that the PP has exercised undue influence to ensure the project is not evaluated as per the TORs imposed.

G. Two TORs dealing with the impact on agricultural land and for a cumulative EIA assessment have been completely ignored in the EIA study and report. This constitutes gross deficiency in the EIA report and in the consequent assessment of the project proposal.

H. Such further and other grounds as may be urged at the time of hearing of this Appeal.

58. The Appellants state that they have applied for information pertaining to the Township project in question from multiple Departments, some of which information is yet to be provided. The Appellants crave leave to produce such relevant information as and when received from these Departments, if required in the course of these proceedings.

LIMITATION

59. The instant appeal is filed 58 days beyond the period of 30 days from the date of communication of the impugned E.C. to the Appellants (*i.e. publication of the E.C. on 2nd September 2023 in the 'Times of India' newspaper*) but within the condonable period and outer limit of 90 days. As such, this Appeal is accompanied by a separate Application/I.A. seeking condonation of delay of 58 days in filing this Appeal, in which reasons are specifically set out explaining the delay of the Appellants in preferring this Appeal.



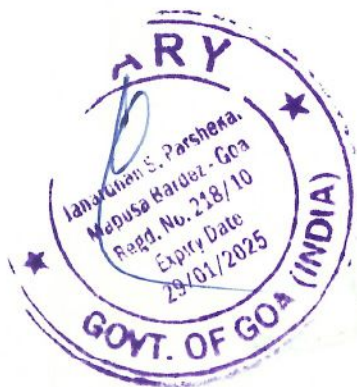
PRAYERS:

60. The Appellants are therefore approaching this Hon'ble Tribunal for the following reliefs:

- a) For an order Allowing this appeal and setting aside the E.C. dated 28.08.2023 granted by the Goa S.E.I.A.A. to Delta Corp Ltd., bearing E.C. Identification No. EC23B039GA122812;
- b) For costs;
- c) For such and further orders as this Hon'ble Tribunal may deem fit to grant.

Interim reliefs:

- c) For an order staying the operation of the impugned EC dated 28.08.2023 bearing E.C. Identification No. EC23B039GA122812 till the hearing and final disposal of this appeal; and;
- d) Pending hearing and disposal of this appeal, this Hon'ble Tribunal may be pleased to stay any work at the impugned project site;
- e) For an order restraining the Resp. No. 2 project proponent and its agents from carrying out any works in pursuance of the impugned EC; pending hearing and disposal of this appeal.



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For the above, the appellants are truly grateful.

DATE : 29.11.2023

PLACE : Mapusa, Goa

Appellant No. 1



Appellant No. 2



Appellant No. 3



Appellant No. 4



Through:


29.11.2023

Adv. Om D'costa,
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**BEFORE THE HON'BLE NATIONAL GREEN
TRIBUNAL, WESTERN ZONE BENCH AT PUNE**

APPEAL NO OF 2023 [WZ]

BETWEEN:

PRAVINSINGH ARJUN SHEDGAONKAR AND ORS.

...APPELLANTS

AND

THE GOA STATE ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY AND ORS.

...RESPONDENTS

AFFIDAVIT IN SUPPORT OF THE APPEAL

I, Pravinsingh Arjun Shedgaonkar, Indian national, age 39 years, Indian national, r/o H. No. 1615/2, Satyabhama Krishna Walkeshwar Wada, Opp. Goa Assembly, Betim, Bardez, Goa – 403101, do hereby solemnly affirm and state as under:



1. That I have read and understood the accompanying Appeal which has been drafted on the instructions of the Appellants No.s 1 to 4 herein.
2. I verify that the contents of paras 1, 2, 3(p), 4(p), 5(p), 6, 7, 8, 9, 10, 11(p), 12, 13, 14, 15, 16, 17, 18, 19(p), 20(p), 21(p), 22(p), 23(p), 24, 26, 27, 28(p), 30(p), 31(p), 32(p), 35(p), 36(p), 37, 38, 39(p), 40(p), 41(p), 42(p), 43(p), 44(p), 45(p), 47, 48(p), 49(p), 50(p), 51(p), 53, 54, 55(p),

56(p), 57(p), 58(p) and 59(p) of the accompanying Appeal are in the nature of facts which are true to my own knowledge and belief, and that the contents of paras 3(p), 4(p), 11(p), 19(p), 20(p), 21(p), 22(p), 23(p), 25, 28(p), 29, 30(p), 31(p), 32(p), 33, 34, 35(p), 36(p), 39(p), 40(p), 41(p), 42(p), 43(p), 44(p), 45(p), 46, 48(p), 49(p), 50(p), 51(p), 52, 55(p), 56(p), 57(p), 58(p), 59(p) and 60 are my submissions, based on legal advice, which I believe to be true and correct.

3. That the Annexures enclosed are true and correct copies of their respective originals, and have been attested by me as such.

Solemnly affirmed at Mapusa, Goa
This the 29th day of November 2023


DEPONENT



Solemnly affirmed before me by Pravinsingh. Arjun Shedgaonkar
Who has been identified by Adv. Hrushikesh.
Who is known to me personally
Mapusa-Goa
Reg. No. 4780/23 Date: 29/11/2023




JANARDHAN S. PARSEKAR
NOTARY AT MAPUSA, BARDEZ-GOA
STATE OF GOA (INDIA)

VERIFICATION

I, Pravinsingh Arjun Shedgaonkar, Indian national, age 39 years, Indian national, r/o H. No. 1615/2, Satyabhama Krishna Walkeshwar Wada, Opp. Goa Assembly, Betim, Bardez, Goa – 403101 hereby verify that the contents of paras 1 - 3 of my above affidavit are true to my knowledge and belief, and that no part of it is false and nothing material has been concealed therefrom.

Verified on the 29th day of
November, 2023, at Mapusa, Goa

Pravinsingh Arjun Shedgaonkar

[Signature]

APPELLANT/DEPONENT



Solemnly affirmed before me by Pravinsingh Arjun Shedgaonkar
Who has been identified by Adv. Hrushikesh
Who is known to me personally
Mapusa-Goa

Reg. No. 4780/23 Date: 29/11/2023

[Signature]
JANARDHAN S. PARSHEKAR
NOTARY AT MAPUSA, BARDEZ-GOIA
STATE OF GOA (INDIA)

**BEFORE THE HON'BLE NATIONAL GREEN
TRIBUNAL, WESTERN ZONE BENCH AT PUNE**

APPEAL NO OF 2023 [WZ]

BETWEEN:

PRAVINSINGH ARJUN SHEDGAONKAR AND ORS.

...APPELLANTS

AND

THE GOA STATE ENVIRONMENT IMPACT

ASSESSMENT AUTHORITY AND ORS..

...RESPONDENTS

Compilation – II

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PLACE – Mapusa, Goa

DATE – 29.11.2023


29.11.2023

Advocate for the Appellants

ENVIRONMENTAL
CLEARANCE

PARIVESH

*(Pro-Active and Responsive Facilitation by Interactive,
and Virtuous Environmental Single-Window Hub)*

**Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), GOA)**

To,

The Manager

DELTA CORP LIMITED

C/o Delta Pleasure Cruise Company Private Limited,
Fisheries Department Building, Ground Floor, DB Road, Panaji Goa-
403001 -403001

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity
under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)
in respect of project submitted to the SEIAA vide proposal number
SIA/GA/INFRA2/429263/2023 dated 16 May 2023. The particulars of the
environmental clearance granted to the project are as below.

1. EC Identification No.	EC23B039GA122812
2. File No.	GA/EC/0092/2023
3. Project Type	New
4. Category	B
5. Project/Activity including Schedule No.	8(b) Townships and Area Development projects.
6. Name of Project	Deltin Town
7. Name of Company/Organization	DELTA CORP LIMITED
8. Location of Project	GOA
9. TOR Date	N/A

The project details along with terms and conditions are appended herewith from page
no 2 onwards.

Date: 28/08/2023

(e-signed)
Dr. Sneha S. Gitte, IAS
Member Secretary
SEIAA - (GOA)

*Note: A valid environmental clearance shall be one that has EC identification
number & E-Sign generated from PARIVESH. Please quote identification
number in all future correspondence.*

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GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Constituted by the Ministry of Environment, Forest and Climate Change,
Government of India

C/o Department of Environment and Climate Change
4th Floor, Dempo Towers, Patto Panaji Goa - 403001.

e-mail: goaseac@gmail.com

No:61/3/2022-23/GSEIAA/Project-Prop /137

Date: 28/08/2023

To,
Delta corp Limited
Dhargalim, Pernem,
Goa

Sub:-Environmental Clearance for Deltin Town for Integrated Resort Complex Project in Plot bearing Survey No.243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A & 280/1-B of Village Dhargalim, Taluka Pernem, District North Goa.

Ref:- SIA/GA/INFRA2/429263/2023 dated 16/05/2023

Sir / Madam,

I am directed to refer to your application dated 16/05/2023 on Parivesh Portal seeking prior Environmental Clearance (EC) for the above project under the EIA Notification, 2006 (*as amended*). Accordingly, the above proposal has been screened and appraised under Category 8 (b), Townships & Area Development projects on the basis of the documents enclosed with application viz. Form 1, Conceptual plan as well as additional clarifications furnished in response to the observations made by the Goa State Expert Appraisal Committee (*hereinafter referred as "Goa-SEAC"*). Further the Goa-SEAC in its 180th meeting held on 9th June 2023 decided to recommend the said proposal to the Authority for grant of Environmental Clearance under the provision of EIA Notification 2006 (*as amended*) with certain 'Specific Conditions' to be complied by the Project Proponent.

The matter was taken up in 107th SEIAA meeting, further the Goa State Environment Impact Assessment Authority (Goa-SEIAA) in its 109th Goa-SEIAA meeting held on 28 July 2023, decided to grant Environmental Clearance under the provision of EIA Notification 2006 (*as amended*) till date.

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Sr. No.	Description	Details	
1.	Name of the project Proponent	Premanand Vasant Gawas (General Manager Legal)	
2.	Address for Communication	Delta Pleasure Cruise Company Private Limited, Fisheries Department Building, Ground Floor, DB Road, Panaji Goa-403001	
3.	Name & location of the project	Proposed Integrated Resort Complex Project on Plot Bearing Survey Nos. 243/1-A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A & 280/1-B of Village Dhargalim, Taluka Pernem, District North Goa, Goa."	
4.	Plot Area	3,20,170.60 sqm	
5.	Net plot Area	3,00,480.40 sqm	
6.	Total construction Area & Proposed Net F.A.R	Total Construction Area (BUA)	3,26,391.30 sqm
		Proposed Net F.A.R	2,06,428.71 sqm
7.	Total water requirement (Construction / operation phase)	Construction phase: Phase I -135 KLD, Phase II- 405 KLD, Phase III- 648 KLD, Phase IV- 202 KLD Operation phase: i) First time water demand – 22760 KL ii) Recurring water demand – 4494 KLD	
8.	Sewage generation (Construction/ Operation Phase)	Construction Phase: Phase I -121 KLD, Phase II- 364 KLD, Phase III- 583 KLD, Phase IV- 182 KLD Operation Phase: 1,639 KLD	
9.	STP Capacity / Proposed Technology (Operation Phase)	It is proposed to install two Sewage Treatment Plants (STP's): 150 KLD and 2000 KLD each	
10.	Total Solid Waste Quantities (Construction / Operation Phase)	Construction Phase: 1019 Kg (Biodegradable and Non-biodegradable waste) Operation Phase: 9948 Kg (Biodegradable, Non-biodegradable waste & Landscape waste)	
11.	Energy Efficiency	Installation of Solar PV panels	
12.	Parking	Required- 2823 Provided- 2832	

Text

13.	Power requirement (Construction/Operation Phase)	Construction Phase: Phase I – 625 KVA Phase II- 1625 KVA Phase III- 2500 KVA Phase IV- 625 KVA Construction Phase: 18,664 KVA
14.	D.G set Capacity (Construction/Operation Phase)	Construction Phase: 2000 KVA X 1 nos. Diesel Generator Set Operation Phase: 2000 KVA X 11 nos. Diesel Generator Sets (10 working + 1 Stand-by)
15.	RWH tank capacity	4000 cubic meters
16.	Project Cost	Rs. 1892.60 Crores
17.	No. of trees to be planted on site	No. of trees to be transplanted- 756 No. of trees to be planted- 4258
18.	No. of trees on site	1964
19.	No. of trees to be cut	257

Project details and salient features of the proposed developmental activity is as under:-

1. **Further, the Authority has decided that Project Proponent needs to comply to the following “General Conditions” during construction phase:**
 - a. The Project Proponent should use Ready-Mixed Concrete (RMC) to minimize air / water/ land pollution and water usage during the construction phase.
 - b. Project Proponent should adopt roof-top rainwater harvesting/ conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
 - c. Project Proponent should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species wherever possible and which are not alien to the prevailing environment.
 - d. Project Proponent should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/ zoning.
 - e. The construction gross built up area of proposed construction is **326391.30 Sq. mts** shall be in accordance with the existing FSI/ FAR norms of the local body and planning authorities and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work.

- f. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- g. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable, failing which the Environmental Clearance herein shall be deemed to be withdrawn and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
- h. Project proponent shall not make any change in the Surface Layout Plan/ Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project proponent needs to inform this Authority.
- i. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- j. Arrangements shall be made that waste water and storm water do not get mixed.
- k. All the top soil excavated during construction activities should be stored if or use in horticulture/ landscape development within the project site.
- l. Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- m. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary authorization of the GSPCB.
- n. Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.
- o. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.



- p. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipment etc. as per National Building Code (NBC) including measures from lighting.
- q. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- r. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- s. Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- t. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- u. Energy conservation measures like installation of only for LEDs' for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used of LED's, if any, should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.
- v. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- w. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided by providing separate entry and exit gate. Parking should be fully internalized and no public place should be utilized.
- x. The Project Proponent shall make suitable provision for sewage disposal by providing Sewage Treatment Plant on site. The STP should be certified by independent expert and adequacy report in this regard should be submitted to GSPCB before the project is commissioned for operation. Necessary measures to be made to mitigate the odour problem from STP. Sewage Treatment Plant should be with operation and maintenance after commissioning/ completion of project with minimum period of 5 years.
- y. Opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non - air conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.



- z. The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- aa. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
- ab. Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the Project Proponent if it was found that construction of the project has been started without obtaining EC.
- ac. Six monthly compliance reports should be submitted to the MoEF&CC with copy to the Goa-SEIAA and GSPCB in hard as well as soft copy format for the period upto the Project completion.
- ad. The Project Proponent shall install STP of capacity 2000 KLD with membrane filtration technology and achieve the standard prescribed by the State Pollution Control Board. To cater the solid waste generated by the construction labour during construction phase.

2. **Project Proponent should implement Dust mitigation measures for construction activities such as:**

- a) Roads leading to or at construction sites must be paved and blacktopped (i.e. metallic roads).
- b) No excavation of soil shall be carried out without adequate mitigation measures in place.
- c) No loose soil or sand or construction and demolition waste or any other construction material that causes dust shall be left uncovered.
- d) Wind-breakers of appropriate height i.e. 1/3rd of the building height and maximum upto 10 meters shall be provided.
- e) Water sprinkling system shall be put in place.
- f) Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.
- g) New serial No. '107' has been inserted which relates to mandatory implementation of dust mitigation measures for all construction and demolition activities.

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- h) Grinding and cutting of building materials in open area shall be prohibited.
- i) Construction material and waste should be stored only within earmarked area and roadside storage of construction material and waste shall be prohibited.
- j) No uncovered vehicles carrying construction material and waste shall be permitted.
- k) Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures shall be notified at the site.
3. **Further**, the Committee decided to direct the Project Proponent to comply with the following **“General Conditions” during post-construction phase:-**
- a) Separate funds shall be allocated for implementation of environmental protection measures / EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
- b) The Project Proponent shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF & CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO₂ and NO_x (*ambient levels as well as D.G. stack emissions*) shall be monitored.
- c) The Project Proponent should provide facilities for storage and segregation of waste generated in three separate streams i.e bio-degradable, Non bio-degradable and domestic hazardous waste in suitable bins and handover segregated wastes to authorized waste pickers or waste collectors as per the directions or notifications by the local Authorities and Goa State Pollution Control Board.
- d) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- e) Project Proponent shall store separately construction and demolition waste, as and when generated, in their own premises and shall be disposed of as per the Construction and Demolition Waste Management Rules 2016.
- f) The Project Proponent store horticultural waste and garden waste in their own premises and shall be disposed as per the directions of the local bodies.

Text



- g) The Project Proponent in partnership with local bodies shall ensure segregation of waste at source by the generators as prescribe in the rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorized waste pickers or the Authorized recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio- methanation within the premises as far as possible. The residual waste shall be given to the waste collector or agency as directed by the local body.
- h) Noise should be controlled to ensure that it does not exceed the prescribed standards both during day & night time.
- i) The ground water drawl from existing/proposed bore wells if any should be done only with the prior permission of Ground Water Board. The ground water level and its quality should also be monitored regularly both during construction and operation phase in consultation with Ground Water Board.
- j) Energy Conservation measures such as solar lighting for common area, solar water heating system, LED's for lighting of areas, LED lights for signage, solar inverters on the etc should be adopted.
- k) Used LED lights should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.
- l) A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors etc and submit to the State Expert Appraisal Committee and a copy to GSPCB in three months time.
- m) Further this EC is issued without prejudice to the action initiated in the Environment (*Protection*) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.

4. Specific Conditions

- a. The Project Proponent should source 100% power requirements through renewable source of energy by 2030.
- b. All street light should be solar street lights.
- c. The Project Proponent should install heat pumps for water heating.

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- d. The Project Proponent should utilize natural lighting systems i.e high performance sunlight collector / passive systems with guiding reflectors.
- e. The Project Proponent should utilized renewable technologies for generation of hot water for laundry and cooking.
- f. STP treated water may be used for laundry
- g. The approach road leading to the site should be constructed prior to commencement of any construction activity at site as per the regulations of the Town & Country Planning Department.
- h. Project Proponent should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- i. Project Proponent needs to ensure that no treated water or any waste sewage shall be discharged into any water body. E-waste shall be disposed through Authorized vendor as per E-waste (*Management and Handling*) Rules, 2011.
- j. Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels towards south facing walls as and when made applicable in future.
- k. The Project Proponent shall utilise fly ash bricks in masonry works.
- l. At least 20% of the open spaces as required by the local building bye-laws shall be previous. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as previous surface.
- m. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window and roof u-values shall be as per ECBC specifications.
- n. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- o. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate re circulation lines for flushing by giving dual plumbing system be done.

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- p. The project proponent will provide landscape bed of 600mm wide X 600mm deep along the periphery of the plot to carry out plantation of trees. The treated water will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- q. Areas which are marked as No Development Zone (NDZ) should be clearly marked on site and no construction shall be carried out in the said NDZ. Land Profile of NDZ shall not be altered.
- r. No construction shall be done over the portion of land, shown as open space in the site plan.
- s. Project Proponent should obtain all the requisite permissions / NOCs / Licenses etc from all the competent authorities before commencement of any activity at site.
- t. *Solar power generation* - Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage to enable installation of solar panels including battery storage system. In addition south facing walls to be utilized to installed solar panels to harness optimum solar energy. Use of solar panels may be done to the extend possible like installing solar street lights. After checking feasibility the Project Proponent should install solar plus hybrid conventional source as source of energy. PP should ensure storage of solar and release in the grid during peak hours.
- u. Solar based electric power shall be provided to each unit for at least two bulbs / lights and one fan. As proposed central lighting and street lighting shall also be based on solar power.
- v. This Environmental Clearance is issued subject to land use verification. Local authority/ planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgments / Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified by the competent authorities.
- w. Project Proponent should ensure and ascertain that 'civil plans' which were submitted to the Committee/ Authority during the process of project appraisal be submitted to other line Departments/ agencies concerned while seeking NOC/ Consents/ Permissions, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.



- x. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local Authority, GSPCB and Planning authority.
- y. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
- z. **Green Building norms should be followed with a minimum 3 star GHIHA/IGBC/ASSOCHAM GEM rating and Gold rating should be followed up.**
- aa. The Project Proponent shall use construction debris for land filling wherever applicable and dispose the C & D waste in compliance to the Construction and Demolition Waste Management Rules.
- ab. Bore well water is not to be used for construction phase, only used for drinking purpose and Project Proponent should maintain the meter reading on regular basis.
- ac. Building should be constructed as per National Building Code 2016 part-IV.
- ad. Project Proponent should do Corporate Environmental Responsibility as recommended / approved by Goa - SEAC/ Goa SEIAA.
- ae. As per office memorandum issued by MoEF&CC dated 1st May 2018, some of the activities which can be carried out in CER, are infrastructure creation for Drinking Water Supply, Sanitation, Health, Education, Skill Development, Roads, Cross Drains, Electrification including Solar Power, Solid Waste Management Facilities, Scientific Support and Awareness to Local Farmers to increase yield of crop and fodder, Rain Water Harvesting, Soil Moisture Conservation Works, Avenue Plantation, Plantation in Community areas, etc.
- af. E-waste generated in the complex should be managed as per CPCB guidelines on E-waste management.
- ag. The Goa-SEIAA reserves their right to add any stringent condition or to revoke the environmental clearance, if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- ah. Further, progress will be reviewed after six months (*minimum 3 times in a year*) depending upon progress of the work. Further, the compliance to these conditions as and when submitted by Project Proponent will be verified / ascertained by the authority to propose additional conditions if any.
- ai. In case of submission of false document and non-compliance to any of the stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under the Environment (Protection) Act, 1986 (*as amended till date*).

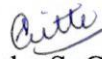
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- aj. Project Proponent should install Bio-gas plant to treat the Bio degradable waste. Biodegradable waste shall be treated in bio-gas plant and the bio-gas shall be utilized for cooking in the cook house. Bio-gas treatment plant capacity should be 25% more than actual needed.
- ak. The Bio-gas slurry should be used as organic fertilizer.
- al. The PP should opt for saving to common area by using Renewable Energy by 5% and total annual saving in percentage 15% with 25% power savings at the end of 5 years.
- am. PP shall operate and maintain effluent treatment plant 400KLD capacity with two stage RO system and sewage treatment plant of 150 KLD to cater the sewage generated from the water park (sewage generation from water park is estimated to be 139 KLD) and STP of capacity 2000 KLD to cater rest of the project (sewage generation from rest of the project is estimated to be 1500 KLD) with membrane filtration technology and achieve the standards prescribed by state pollution control Board. The PP will recycle the treated ETP water for cooling and treated STP water for flushing and gardening. The PP shall installed online STP and ETP equipment performance monitoring system as well as online treated water quality Monitoring system.
- an. The PP shall utilize Concentrated solar power technologies to generate electricity.
- ao. The source of water is proposed to be water tankers carrying water in vicinity of 10-12 km from the project site.
- 5. **In addition**, the following conditions shall be specifically complied with:
 - a. Project proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Konkani or Marathi language within seven days of receipt of this communication, informing that the proposed project has been accorded prior Environmental Clearance (EC) and the copies of the clearance letter will be available on the PP website.
 - b. **Validity of the Environmental Clearance (EC) accorded shall be for a period of 07 (seven) years from the date of its issue.**
 - c. These stipulations would be enforced among others under the provisions of Water (*Prevention and Control of Pollution*) Act, 1974, the Air (*Prevention and Control of Pollution*) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
 - d. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by State Environment Impact Assessment Authority.

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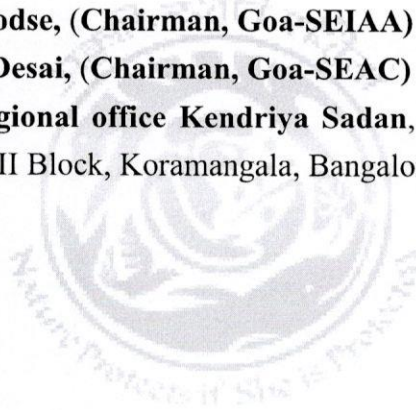
- e. Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.
- f. Any appeal against this prior environmental clearance shall lie with the National Green Tribunal (NGT), if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010 (*Central Act 19 of 2010*).

Yours faithfully,


(Dr. Sneha S. Gitte, IAS)
Director, (Environment),
Member Secretary, Goa-SEIAA

Copy for favour of information to

1. **Prof. Suhas Godse, (Chairman, Goa-SEIAA)**
2. **Shri Gautam Desai, (Chairman, Goa-SEAC)**
3. **Integrated Regional office Kendriya Sadan, 4th Floor, E & F Wings,**
17th main road, II Block, Koramangala, Bangalore-560034





जहाँ है हरियाली ।
वहाँ है खुशहाली ॥

Ministry of Environment & Forests
GOVERNMENT OF INDIA, NEW DELHI

ANNEXURE 2

[Extract]

Environmental Impact Assessment Guidance Manual for **BUILDING, CONSTRUCTION, TOWNSHIPS and AREA DEVELOPMENT PROJECTS**



Prepared by



Administrative Staff College of India
Bellavista, Khairatabad, Hyderabad

February 2010

INTRODUCTION

1.0 Preamble

This section of the manual provides information and guidance on Environmental Impact Assessment (EIA) in townships and area development projects. It is intended as a resource for those who are involved in EIA practice. Particular emphasis is given to concepts, procedures and tools that are used currently or are potentially relevant in preparing environmental impact assessment reports for clearance from regulatory agencies. EIA is a technical exercise, to predict environmental impacts, assess their significance, and provide recommendations for their mitigation. The assessment covers construction and operation of the development and can consider site decommissioning. EIA report covers a wide range of technical disciplines and covers areas such as noise and vibration, air quality, ecology, contamination, water quality & hydrology, archaeology & cultural heritage, landscape & visual character, sustainability and socio-economics. The EIA report will describe how the project has been improved through the EIA process and what alternatives were considered.

1.1 General Information on Township and Area Development Projects

Township in general, is self contained and integrated in the social infrastructure needs, services, shopping, entertainment and waste management. Infrastructure and services include road network, water supply and management, electricity supply and management and proper communication services. Social infrastructure includes schools, medicare, recreation and community centre. Shopping centre with adequate facilities should be housed in the township itself.

Proper waste management including garbage collection, segregation, treatment and disposal with the township should be provided. Maintenance of infrastructure and proper security and safety of the residents is to be ensured.

1.2 Environmental Clearance Process

The objective of the EIA Notification, 2006 is to set procedures of environmental clearance before establishment of identified nature and size. The suitability of site proposed for a proposed development is one of primary concerns in according environmental clearance to a project.

The applicant will have to furnish, along with the application, in addition to Form 1 and the supplementary Form 1A, a copy of the conceptual plan. The details of the categories mentioned in the given schedule are as follows:

Project or Activity		Category with threshold limit - B Category	General Conditions
8.	Building /Construction Projects/Area Development Projects and Townships		
8(a)	Building and Construction projects	≥20000 sq.mtrs and <1,50,000 sq.mtrs. of built-up area#	"Any project or activity specified in Category 'B' will be treated as Category 'A' if located in whole or in part within 10 km from the boundary of: (i) Protected areas notified under the Wildlife
8(b)	Townships and Area Development	Covering an area ha and or built up area ≥ 1,50,000 sq. mtrs. ++	(Protection) Act, 1972; (ii) Critically polluted areas as identified by the Central Pollution Control Board from time to time; (iii) Eco-sensitive areas as notified under section 3 of the Environment (Protection) Act, 1986, such as, Mahabaleswar Panchangi, Matheran, Pachmarhi, Dahanu, Doon Valley and (iv) inter-state boundaries and international boundaries. Provided that the requirement regarding distance of 10km of the inter-state boundaries can be reduced or completely done away with by an agreement between the respective states or U.Ts sharing the common boundary in the case the activity does not fall within 10 kilometers of the areas mentioned at item (i), (ii) and (iii) above
# (built up area for covered construction; in the case of facilities open to the sky, it will be the activity area)			
++All projects under Item 8(b) shall be appraised as Category B1			

This manual addresses the important issues to be discussed in the environmental impact assessment of building construction, townships and area development projects. Fig.1 shows the EIA clearance process for the building construction, townships and area development projects.

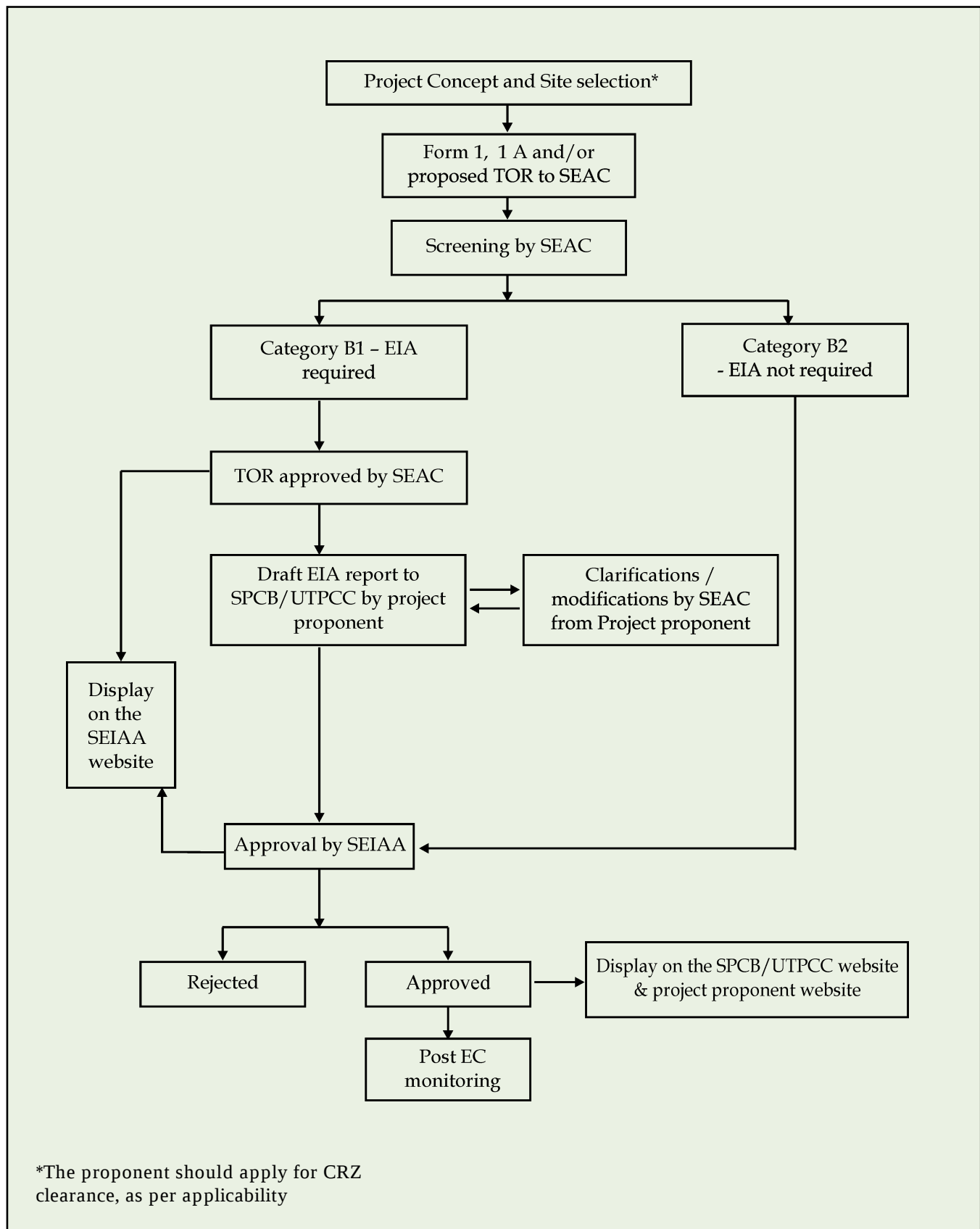


Figure 1.1: Prior Environmental Clearance Process for Category B Projects

GLOSSARY

- ▶ “Built Up Area (BUA)” means the gross permissible built up area of a Township.
- ▶ “Township” means an integrated development of a contiguous land parcel which contains within itself requisite physical and social infrastructure, with access to off site physical and social infrastructure and fulfils all conditions laid down under this policy.
- ▶ “Ancillary Housing” means housing developed principally to support the workforce of an economic activity developed within the Township.
- ▶ “On-site Physical Infrastructure” means all the on site services such as roads including approach Roads, Street lights, Water supply system, Sewerage system, Storm water drainage system, Electrical Network, Communication Network, Sewage Treatment Plants, Percolation Wells, Solid Waste Disposal system, Common Effluent Treatment Plants (CETP), spaces for Informal Services etc. as provided for in Schedule
- ▶ “On-site Social Infrastructure” means all the on site amenities supportive to the resident population as per the prevailing norms such as Nursery, Crèche, Primary school, Composite School, Dispensary, Polyclinic, Community Hall, Library, Convenience Shopping, Playfields, Parks, Police station, Public parking, Bus station, Fire station, Post office etc, EWS Housing for the informal service providers of the Township, all the components necessary to facilitate barrier free accessibility for the Senior citizens and Physically challenged persons as prescribed by the concerned GDCRs and land reservations for social infrastructure requisite on the macro scale to be handed over to the local Authority as may be prescribed by the Authority.
- ▶ “Scale Category (SC)” means Township categories based on the scale of land area, BUA and investment as defined in the Policy.
- ▶ “Use Category (UC)” means Township categories based on the predominant activity as defined in the Policy.
- ▶ “Vulnerable Area” means areas where development of Townships will be subject to compliance to norms for mitigation of potential hazards and their impacts.
- ▶ “Developer” means a Company, a Government Corporation, a group of Companies in Joint Venture, undertaking the development of the Township.
- ▶ “Facility Management Services” means the services offered by a private sector, public sector, joint sector or consortium for the Operation & Maintenance of all on site physical and social infrastructure.

Annexure 2

Land use / land cover classification system

Level -I	Level -II	Level -III
1. Built – up land	1.1. Built –up land	1.1.1. Urban (towns & cities)
2. Agricultural land	2.1. Crop land	2.1.1. Irrigated crop land
	(i) kharif (ii) rabi (iii) double cropped	2.1.2. Unirrigated crop land
	2.2. Fallow	2.2.1. Fallow
	2.3. Plantation	2.3.1. Types of plantation, casuarina, coconut, tea etc.
3. Forest	3.1 evergreen /semi-evergreen	3.1.1. Dense / closed 3.1.2. Open
	3.2. Deciduous	
	3.3. Degraded scrub land	
	3.4. Forest blank	3.4.1. Degraded forest 3.4.2. Forest blank
	3.5. Forest plantation 3.6. Mangrove	3.5.1. Types of plantation eg. teak, sal etc.
4. Wastelands	4.1. Salt affected land	
	4.2. Water logged land	
	4.3. Marshy / swampy land	
	4.4. Gullied / ravinous land	
	4.5. Land with or without scrub	
	4.6. Sandy area (coastal & desartic)	Minimum mappable unit IS 2.25 hectares on 1:50,000 scale
	4.7. Barren rocky / stony waste / sheet rock areas	
5. Water bodies	5.1. River / stream	
	5.2 Lake /reservoir /tank/ canal	
6. Others	6.1. Shifting cultivation	6.1.1. Current 6.1.2. Old / abandoned
	6.2.grassland / grazing land	6.2.1. Grassland / grazing land
	6.3. Snow covered /glacial area	6.3.1. Snow covered / glacial area
	6.4. Mining area	6.4.1. Mining dumps

Note: Land use / Land cover categories at different levels and corresponding scales for mapping are as follows:

Level – I	– categories	– 1:1000,000 scale
Level – II	– categories	– 1:250,000 scale
Level – III	– categories	– 1:50,000 scale and 1:25,000 scale

(Sources: Description and classification of land use / land cover : NRSA – TR – LU & CD – 01 –90)

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(2011) 1 Supreme Court Cases 744

(BEFORE S.H. KAPADIA, C.J. AND AFTAB ALAM AND
K.S.P. RADHAKRISHNAN, JJ.)

a

IN RE: CONSTRUCTION OF PARK AT NOIDA
NEAR OKHLA BIRD SANCTUARY

ANAND ARYA AND ANOTHER

.. Applicants;

Versus

b

UNION OF INDIA AND OTHERS

.. Respondents.

T.N. GODAVARMAN THIRUMULPAD

.. Petitioner;

Versus

UNION OF INDIA AND OTHERS

.. Respondents.

c

IAS Nos. 2609-10 of 2009 in WP (C) No. 202 of 1995[†] with
IAS Nos. 2896, 2900 of 2010 in IAS Nos. 2609-10 of 2009 and
IA No. 2928 of 2010 in IAS Nos. 2609-10 of 2009 in
WP (C) No. 202 of 1995, decided on December 3, 2010

A. Environment Protection and Pollution Control — Forests — What are — Determination of forest land — Approach and considerations — Man-made forest and Afforestation — What are — Plantations for purpose of creating an urban park distinguished from afforestation — State Government project at NOIDA for building large-scale memorial with extensive stone-work diverting such urban park land and felling all trees thereon — Legality of — Held, any definition of “forest” howsoever wide relates to a context and cannot be applied absolutely, universally and totally independent of context — Though man-made forest with passage of time may acquire forest-like character and become forest, this rule has no universal application — Planting of trees in agricultural/non-forest land being for purpose of creating urban park and not for purpose of afforestation — Such trees being allowed to stand and grow for about 12-14 years when they were cut down to make the area clear for alleged project on forest land — Said plantation, held, cannot be classified as forest land, nor deemed forest nor forest-like area — Hence impugned project not illegal — Forest (Conservation) Act, 1980 — S. 2 — Term “forest” under — Determination of ambit of

d

e

f

B. Environment Protection and Pollution Control — Forests — Identification — Acceptable evidence/proof — Satellite image showing forest cover, held, may not reveal complete picture — Revenue records corroborated by land acquisition proceedings revealed that land was not forest — Such revenue records were reliable because, they were much prior to project alleged to have diverted forest land — Forest (Conservation) Act, 1980 — S. 2 — Evidence Act, 1872 — S. 4 — Evidentiary value of satellite

g

h

[†] Under Article 32 of the Constitution of India

NOIDA MEMORIAL COMPLEX NEAR OKHLA BIRD SANCTUARY, IN RE 745

**image for determining forest areas, held, may not be conclusive —
Therefore, such evidence read with other evidence and ground realities**

- a C. Environment Protection and Pollution Control — Forest (Conservation) Act, 1980 — S. 2 — Prior approval under, for using land for non-forest purpose — When not required — Project site not being classifiable as forests, prior approval of Central Government, held, was not required**

- b** The centre of the controversy in the present IAs involved a very large project of the Uttar Pradesh Government at NOIDA. The two applicants were residents of NOIDA and had challenged the project on the grounds (1) that the project area was a forest area and violated Section 2, FC Act, (2) that no environmental clearance of EIA Authorities was obtained even if the project fell within the EIA Notification, 2006 under Section 3(3), EP Act and (3) that the project devastated the delicate and sensitive ecological balance of the Okhla Bird Sanctuary to which the site of the project lay adjacent.

- c** Disposing of the IAs, the Supreme Court

Held :

The project site is not forest land and the construction of the project without the prior permission from the Central Government does not in any way contravene Section 2, FC Act. The restriction imposed by Section 2(ii) is in respect of forest land. (Para 37)

- d** A satellite image may not always reveal the complete story. In support that there used to be a forest at the project site, the applicants rely upon the report of the CCF based on site inspection and the Google image and most heavily on the FSI Report based on satellite imagery and analysed by GSI application. (Para 24)

- e** In the revenue records, none of the khasras (plots) falling in the project area was ever shown as jungle or forest. According to the settlement year 1359 Fasli (1952 AD) all the khasras are recorded as *agricultural land*, banjar (uncultivable) or parti (uncultivated). The records of the land acquisition proceedings in 1980 to 1983 and 1991 also complement the revenue record of 1952 in which the lands were shown as *agricultural and not as jungle or forest*. There is no reason not to give due credence to these records since they pertain to a time when the impugned project was not even in anyone's imagination and its proponents were nowhere on the scene. (Paras 24 and 25)

Samatha v. State of A.P., (1997) 8 SCC 191; *M.C. Mehta v. Union of India*, (2004) 12 SCC 118; *T.N. Godavarman Thirumulpad v. Union of India*, (1997) 2 SCC 267, referred to

- g** The records pertaining to satellite images have not given information about the different species of trees, their age and the girth of their trunks, etc. The satellite images only reveal that in October 2006 there was thin to moderately dense tree cover over about half of the project site. But this fact is all but admitted. The State Government admits to felling of over 6000 trees in 2008. As per government information on a large tract of land (33.45 ha in area) that was forever agricultural in character, trees were planted with the object of creating an urban park (and not for afforestation!). The trees, thus, planted were allowed to stand and grow for about 12-14 years when they were cut down to make the area clear for the project. (Paras 27 and 26)

- h** But trees planted in the project area cannot be branded as "forest". It is inconceivable that trees planted with the intent to set up an urban park would

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turn into forest within a span of 10 to 12 years and the land that was forever agricultural, would be converted into forest land. One may feel strongly about cutting trees in such large numbers and question the wisdom behind replacing a patch of trees by large stone columns and statues but that would not change the trees into a forest or the land over which those trees were standing into forest land. (Paras 28 and 27)

In the order dated 12-12-1996 in *T.N. Godavarman Thirumulpad case*, (1997) 2 SCC 267 the Court gave a very wide definition of “forest”. But any definition howsoever wide relates to a context. There can hardly be a legal definition, in terms absolute, and totally independent of the context. The context may or may not find any articulation in the judgment or the order but it is always there and it is discernible by a careful analysis of the facts and circumstances in which the definition was rendered. (Paras 29 to 31)

If the contention of the applicants is accepted and the criterion fixed by the State Level Expert Committee that in the plains a stretch of land with an area of 2 ha or above, with the minimum density of 50 trees per hectare would be a deemed forest is applied mechanically and with no regard to the other factors a greater part of Lutyens Delhi would perhaps qualify as forest. This was obviously not the intent of the order dated 12-12-1996. (Para 36)

The CEC on a consideration of all the materials made available to it, including the report of the FSI (on which the applicants heavily rely), came to hold and find that the project site was not a forest or a deemed forest or a forest-like area in terms of the order of the Supreme Court dated 12-12-1996. (Paras 9 to 16)

No doubt a man-made forest may equally be a forest as a naturally grown one and a non-forest land may also, with the passage of time, change its character and become forest land. But this also cannot be a rule of universal application and must be examined in the overall facts of the case. Otherwise it would lead to highly anomalous conclusions. Almost all the relied on orders and judgments defining “forest” and “forest land” for the purpose of the FC Act were rendered in the context of mining or illegal felling of trees for timber or illegal removal of other forest produce or the protection of national parks and wildlife sanctuaries. In the case in hand the context is completely different. Hence, the decisions relied upon can be applied only to an extent and not in absolute terms. (Para 35)

T.N. Godavarman Thirumulpad v. Union of India, (1997) 2 SCC 267; *T.N. Godavarman Thirumulpad (98) v. Union of India*, (2006) 5 SCC 28; *T.N. Godavarman Thirumulpad v. Union of India*, (2010) 6 SCC 747, referred to

Samatha v. State of A.P., (1997) 8 SCC 191; *M.C. Mehta v. Union of India*, (2004) 12 SCC 118, partly distinguished

Ambica Quarry Works v. State of Gujarat, (1987) 1 SCC 213; *Rural Litigation and Entitlement Kendra v. State of U.P.*, 1989 Supp (1) SCC 504; *Supreme Court Monitoring Committee v. Mussoorie Dehradun Development Authority*, (1997) 11 SCC 605; *State of Bihar v. Banshi Ram Modi*, (1985) 3 SCC 643, cited

D. Environment Protection and Pollution Control — Forests — Diversion of forest land — State Government project at Noida for building large-scale memorial with extensive stone-work — Classification of — EIA clearance, whether required as per scheme of EIA Notification S.O. 1533(E) dt. 14-9-2006 issued under S. 3(3), EP Act — (1) Applying common parlance

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- test to consider dominant purpose of alleged project, and (2) considering scheme of said notification, held, project concerned does not fall under B1 category requiring EIA report/clearance — Project cannot be classified as “township and area development project” under Item 8(b) because its total area and building area are 33.43 ha and 1,05,544.49 sq m respectively whereas the threshold limit for EIA eligibility is 50 ha and 1,50,000 sq m respectively as per Columns 5 and 4 of Schedule to said notification, respectively — Project cannot be classified as “building and construction project” under Item 8(a) either as notification treats projects under Item 8(b) separately and differently from those under Item 8(a) and considering dominant character of project it could have fallen under Item 8(b) if it would not have been within prescribed threshold limits — Environment (Protection) Act, 1986 — S. 3(3) — Notification S.O. 1533(E) dt. 14-9-2006 Items 8(a) and (b) of Schedule — Applicability (Paras 43 to 46, 60 and 66)
- T.N. Godavarman Thirumulpad v. Union of India*, (2010) 13 SCC 740, referred to
- E. Environment Protection and Pollution Control — Forests — Diversion of forest land — EIA clearance, whether required as per scheme of EIA Notification S.O. 1533(E) dt. 14-9-2006 issued under S. 3(3), EP Act — Different categories and their requirements, stated (Paras 50 and 51)
- F. Evidence Act, 1872 — Ss. 3, 5, 7 and 9 — Irrelevance of derivative issues — Since it is held that project concerned does not come within ambit of notification concerned, the other three arguments based on activity area, application of general condition and application of the Office Memorandum dt. 2-12-2009, held, become irrelevant and need not be gone into (Paras 67 and 57)
- G. Constitution of India — Arts. 21, 48-A and 51-A(g) — Town planning project — Viability and continuance of, considering it being adjacent to bird sanctuary — Expert body not holding project to be calamitous or ruinous enough to be entirely scrapped in order to save bird sanctuary — Therefore, said project allowed to continue with conditions recommended by expert bodies and further condition of being overseen by expert committee as directed — Further clarified that this is not to be treated as a precedent when Court is hearing matter on “buffer zones” — Environment Protection and Pollution Control — Wildlife — Wildlife sanctuary — Buffer zones — Applicable principles and law (Paras 74 and 79 to 82)
- Goa Foundation v. Union of India*, WP (C) No. 460 of 2004 order dated 4-12-2006; *T.N. Godavarman Thirumulpad v. Union of India*, (2010) 13 SCC 740; *M.C. Mehta v. Union of India*, (1986) 2 SCC 176 : 1986 SCC (Cri) 122; *M.C. Mehta v. Union of India*, (1987) 4 SCC 463; *M.C. Mehta v. Union of India*, (1988) 1 SCC 471 : 1988 SCC (Cri) 141; *Chhetriya Pardushan Mukti Sangharsh Samiti v. State of U.P.*, (1990) 4 SCC 449; *Subhash Kumar v. State of Bihar*, (1991) 1 SCC 598; *Virender Gaur v. State of Haryana*, (1995) 2 SCC 577; *B.L. Wadehra (Dr.) v. Union of India*, (1996) 2 SCC 594; *Vellore Citizens’ Welfare Forum v. Union of India*, (1996) 5 SCC 647; *A.P. Pollution Control Board v. Prof. M.V. Nayudu*, (1999) 2 SCC 718; *Narmada Bachao Andolan v. Union of India*, (2000) 10 SCC 664; *T.N. Godavarman Thirumulpad v. Union of India*, (2002) 10 SCC 606; *Ramji Patel v. Nagrik Upbhokta Marg Darshak Manch*, (2000) 3 SCC 29; *State of M.P. v. Kedia Leather & Liquor Ltd.*, (2003) 7 SCC 389 : 2003 SCC (Cri) 1642, referred to

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H. Environment Protection and Pollution Control — Environment (Protection) Act, 1986 — S. 3(3) — Notification for EIA clearance under — Clarity of notification, stressed — EIA Notification S.O. 1533(E) dt. 14-9-2006 not being clear enough — Government directed to urgently look into said issue (Para 83)

SS-D/47084/C

Advocates who appeared in this case :

H.P. Raval, Additional Solicitor General, S.K. Dwivedi, Additional Advocate General, Harish N. Salve, U.U. Lalit, Jayant Bhushan, K.K. Venugopal, Raju Ramachandran and S.C. Mishra, Senior Advocates (Siddhartha Chowdhury, A.D.N. Rao, P.K. Manohar, Mihir Chatterjee, Harish Beeran, Manish Kr. Bishnoi, Gautam Talukdar, R.K. Gupta, Rajiv Kr. Dubey, Ankur Talwar and Kamendra Mishra, Advocates) for the appearing parties.

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24. (1985) 3 SCC 643, *State of Bihar v. Banshi Ram Modi* 760f, 761d-e, 761e, 761f-g

h

NOIDA MEMORIAL COMPLEX NEAR OKHLA BIRD SANCTUARY, IN RE 749
(*Aftab Alam, J.*)

The Judgment of the Court was delivered by

- a* **AFTAB ALAM, J.**— At the centre of the controversy is a very large project of the Uttar Pradesh Government at NOIDA. Objecting to the project are the two applicants who are residents of Sector 15-A, NOIDA, U.P. They claim to be public-spirited people, committed to the cause of environment. According to them, the project, undertaken at the instance of the Uttar Pradesh Government is a “huge unauthorised construction”.
- b* 2. The applicants state that a very large number of trees were cut down for clearing the ground for the project. The trees that were felled down for the project formed a “forest” as the term was construed by this Court in its order dated 12-12-1996 in *T.N. Godavarman Thirumulpad v. Union of India*¹ and the action of the Uttar Pradesh Government in cutting down a veritable forest without the prior permission of the Central Government *and* this Court, was
- c* in gross violation of Section 2(ii) of the Forest (Conservation) Act, 1980 (hereafter “the FC Act”). The project involved massive constructions that were made without any prior environmental clearance from the Central Government based on environment impact assessment. The constructions were, therefore, in complete breach of the provisions of the Environment (Protection) Act, 1986 (hereafter “the EP Act”) and the notification issued
- d* under the Act. More importantly, the project was causing great harm, and was bound to further devastate the delicate and sensitive ecological balance of the Okhla Bird Sanctuary to which the site of the project lay adjacent. The project was, thus, in complete disregard of this Court’s directions concerning “buffer zones”.
- e* 3. The State of Uttar Pradesh, of course denies, equally strongly, all the allegations made by the applicants. According to the State, it was setting up a park that would develop and beautify the area in a unique way. The park was conceived as a fine blend of hard and soft landscaping with memorial structures and commemoration pieces. The construction of the park did not violate any law or the order of the Court. There was no infringement of the provisions of the FC Act or the EP Act or the notification made under it.
- f* Further, the setting up of the park caused no harm to the bird sanctuary. The applicants’ objections to the construction of the park were fanciful and imaginary and actuated by oblique motives.

The Project

- g* 4. Before proceeding to examine the arguments of the two sides in greater detail it would be useful to take a look at the project and to put at one place the basic facts concerning it that are admitted or at any rate undeniable.

- h* (i) The project is sited at Sector 95, NOIDA. According to the applicants, at the site of the project previously there used to be five parks on the Yamuna front, namely, Mansarovar, Nandan Kanan, Children’s Park, Smriti Van and Navagraha, opposite Sectors 14-A, 15-A and 16-A, NOIDA.

¹ (1997) 2 SCC 267

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(ii) The project site, on its western side, lies in very close proximity to the Okhla Bird Sanctuary. The bird sanctuary was formed as a large water body with the adjoining land mass of the embankment as a result of the construction of the Okhla Barrage. It falls partly in Delhi and partly (400 ha in area) in the district of Gautam Buddha Nagar, U.P. The administrative control of the area of the sanctuary is under the Uttar Pradesh Irrigation Department and its management is with the Uttar Pradesh Forest Department. The sanctuary is home to about 302 species of birds. According to the Bombay Natural History Society, out of the bird species found here, 2 are critically endangered, 11 are vulnerable and 7 are nearly threatened. About 50 species are migratory in nature and come here mainly during the winter months. The annual population/visit is estimated as under:

2006-2007	24,166
2007-2008	17,111
2008-2009	21,272

This haven for birds was declared a bird sanctuary (the Okhla Bird Sanctuary) vide Notification dated 8-5-1990 issued by the State of Uttar Pradesh under Section 18 of the Wildlife (Protection) Act, 1972. The project, subject of the present controversy, is sited in very close proximity to the Okhla Bird Sanctuary on its eastern side. The applicants refer to it as adjoining the left afflux bund of the Okhla Bird Sanctuary but to be accurate it lies about 35-50 m away from the outer limit of the sanctuary. According to the applicants, the boundary of the project site is as under:

North	Delhi-U.P. DND Toll Road
South	Not clearly stated
East	Dadri Road
West	Okhla Bird Sanctuary, left afflux bund

(iii) The project is spread over an area of 33.43 ha, equal to 334334.00 sq m of land surrounded by a boundary wall made of stone, 2 m in height and 0.3 m in thickness. The estimated cost of the project is ₹685 crores.

(iv) At the site of the project there used to be a tree cover, thin to high-moderate in density and for clearing the ground for the project six thousand one hundred and eighty-six (6186) trees were cut down and one hundred and seventy-nine (179) were “shifted”. These trees were of subabul, bottle brush, bottle palm, morepankhi, *Ficus benjamina*, *Cassia siamea*, eucalyptus, fishtail palm, rubber plant, silver oak, etc.

(v) The project, though insisted upon by the Uttar Pradesh Government as nothing but a “recreational park”, involves the construction of dedicatory columns, commemorative plaza, national memorial, plinth with sculptures, larger than life-size statues on tall

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(Aftab Alam, J.)

a pedestals, large stone tablets with tributary engravings, pedestrian pathways, service block, boundary wall, hard landscape, soft landscape, etc. As initially planned the break-up of the area under different uses was as under:

	<i>b</i>	1.	Total area within boundary wall	3,34,334.00 sq m	
		2.	Total built-up covered area for activities		
		(a)	Memorial building and toilet blocks	3499.50 sq m	1.05%
		(b)	Utilities and facilities	3500.00 sq m	1.05%
	<i>c</i>	3.	Area under hard landscape (including platforms, plinth, sculptures and surrounding paved areas, paths)		
				1,29,140.80 sq m	38.62%
	<i>d</i>	4.	Total area under soft landscape		
		(a)	Area under grass and plantation	1,57,161.79 sq m	47.01%
		(b)	Area under planters built within paved areas	6181.91 sq m	1.85%
	<i>e</i>	5.	Total area for vehicular movement with grass pavers (maintenance, fire path, etc.)	34,850.00 sq m	10.42%

f (vi) According to the State Government, the work on the project commenced in January 2008. The applicants filed IA No. 1179 before the Central Empowered Committee (hereafter “CEC”) constituted by this Court on 5-3-2009. They filed IAs Nos. 2609-10 of 2010 (presently in hand) before this Court on 22-4-2009. According to the State Government, by that time 50% of the construction work of the project was complete. The report from CEC was received in this Court on 4-9-2009 and on 9-10-2009, this Court by an interim order restrained the State Government from carrying on any further constructions till further orders. By that time, according to the Government, 70-75% of the construction work of the project was completed.

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(vii) In the course of hearing of the matter, on a suggestion made by the Court, the State Government modified the layout plan increasing the soft/green area from 47% to 65.28% of the total area of the project. The revised layout plan is as under: a

Sl. No.	Description	Existing (in sq m + %)	Modified (in sq m + %)
1.	Green area	1,57,161.79 (47%)	2,18,246.51 (65.28%)
2.	Hard landscape	1,29,140.80 (38.6%)	98,544.99 (29.48%)
	(a) Boundary wall	2700.79 (0.81%)	2700.79 (0.81%)
	(b) Platforms, plinths, sculpture and surrounding paved areas	1,26,440.00 (37.79%)	95,844.99 (29.48%)
3.	Area for vehicular movement	34,850.00 (10.42%)	0.00 (Nil)
4.	Area under ornamental water feature (may be considered part of the eco friendly area)	0.00 (Nil)	6302.00 (1.88%)
5.	Area under parking with grass pavers (may be considered part of the eco friendly area)	0.00 (Nil)	4241.00 (1.27%)
6.	Utilities and facilities	3500.00 (1.05%)	3500.00 (1.05%)
7.	Memorial building and toilets	3499.50 (1.05%)	3499.50 (1.05%)
8.	Total area	3,34,334.00 (100%)	3,34,334.00 (100%)

Under the amended plan, around 7300 trees, more than 4 years of age and measuring 8-12 ft in height, belonging to the native species such as neem, peepal, pilkhan, maulsari, imli, shisham, mango, litchi and belpatra will be planted in the project area. f

5. According to the State Government, the revised plan that includes planting of trees in such large numbers would not only restore the tree cover that was in existence at the site earlier but would make the whole area far better, more beautiful and environment friendly. The applicants, however, would have none of it. On their behalf it is contended that the whole project is bad and illegal from every conceivable point of view; its construction was started and sought to be completed at a breakneck speed in flagrant violation of the laws. According to the applicants, therefore, all the structures at the project site, complete, semi-complete or under construction must be pulled down and the project site be restored to its original state. g
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The project and Section 2 of the FC Act

- a 6. Mr Jayant Bhushan, learned Senior Counsel appearing for the applicants submitted that over six thousand trees were admittedly cut down for clearing the area for the construction of the project and it was, thus, clearly a case of forest land being put to use for non-forest purpose in complete violation of Section 2(ii) of the FC Act.

- b 7. Section 2 of the FC Act, insofar as relevant for the present, provides as follows:

“2. *Restriction on the de-reservation of forests or use of forest land for non-forest purpose.*—Notwithstanding anything contained in any other law for the time being in force in a State, no State Government or other authority shall make, except with the prior approval of the Central Government, any order directing—

- c (i) * * *
(ii) that any forest land or any portion thereof may be used for any non-forest purpose;
(iii)-(iv) * * *

- d *Explanation.*—For the purposes of this section ‘non-forest purpose’ means the breaking up or clearing of any forest land or portion thereof for—
(a) the cultivation of tea, coffee, spices, rubber, palms, oil-bearing plants, horticultural crops or medicinal plants;
(b) any purpose other than re-afforestation,

- e but does not include any work relating or ancillary to conservation, development and management of forests and wildlife, namely, the establishment of checkposts, fire lines, wireless communications and construction of fencing, bridges and culverts, dams, waterholes, trench marks, boundary marks, pipelines or other like purposes.”

The restriction imposed by Section 2(ii) is in respect of forest land. It, therefore, needs to be ascertained whether the project area can be said to be forest land where there was a forest that was cut to make the site clear for the project.

- f 8. In support of the contention that the trees that were cleared for the construction of the project comprised a forest, the applicants rely heavily on the order passed by this Court on 12-12-1996 in *T.N. Godavarman Thirumulpad*¹, being the first in a series of landmark orders passed by this Court in an effort to save the fast diminishing forest cover of the country against the greedy and wanton plundering of its natural resources. In that order the Court gave a number of directions. One such direction, at Serial No. 5 to each of the State Governments, is as under: (SCC p. 271, para 5)

- g “5. (5) Each State Government should constitute within one month an Expert Committee to:
(i) identify areas which are ‘forests’, irrespective of whether they are so notified, recognised or classified under any law, and
h irrespective of the ownership of the land of such forest;

1 *T.N. Godavarman Thirumulpad v. Union of India*, (1997) 2 SCC 267

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(ii) identify areas which were earlier forests but stand degraded, denuded or cleared; and

(iii) identify areas covered by plantation trees belonging to the Government and those belonging to private persons.”

9. In pursuance of the direction of the Court in *T.N. Godavarman Thirumulpad*¹, the Uttar Pradesh Government constituted the State Level Expert Committee for identifying forests and forest-like areas. The Committee in its report dated 12-12-2007 framed certain parameters for identification of forest-like areas according to which, in the plains, any stretch of land over 2 ha in area with the minimum density of 50 trees per hectare would be considered as “forest”. On 11-1-2008 (as taken note of in the order of that date) it was reported to this Court that the guidelines were issued for identification of forest-like areas and steps would be taken to identify “forest-like areas” in all the districts in the State of Uttar Pradesh within four months and such areas would be handed over to the Forest Department, excepting the private areas, if any.

10. As the process of search and identification of forest-like areas in the districts of Uttar Pradesh proceeded, the District Level Committee headed by the District Collector, Gautam Buddha Nagar, by its letter dated 26-2-2008 addressed to the Conservator of Forests and Regional Director intimated that there was no forest-like area in the district and consequently the project site was not identified as a forest or forest-like area by the State Level Expert Committee constituted in pursuance of this Court’s order dated 12-12-2006. It was in this background that the project started, according to the State Government, in January 2008. When the work on the project became noticeable from the outside the applicants filed their complaint before the CEC on 5-3-2009.

11. As the controversy erupted with regards to “large-scale construction near the Okhla Bird Sanctuary by the State Government” the Ministry of Environment and Forests (hereafter “MoEF”) asked the Chief Conservator of Forests (CCF), Central Region, Lucknow, to make a site inspection of the project and to give his report. The CCF in his report dated 10-7-2009 did not accept the stand of the State Government that there was no forest on the project site. He stated that 6000 trees were “sacrificed” in an area of 32.5 ha and that showed that the area had sufficiently dense forest cover and would qualify as “forest” according to the dictionary meaning of the word and as directed by the Supreme Court. He, however, suggested that before taking a final view on the matter a report may be called for from the Forest Survey of India (hereafter “FSI”) in order to verify the vegetation cover over the area before the construction work started there.

12. In the light of the report by the CCF, the MoEF noted that the number of cut trees, in ratio to the project area, was apparently more than three times in excess of the criterion fixed by the State Level Expert Committee for identification of forest like areas (i.e. minimum of 50 trees per hectare). As

¹ *T.N. Godavarman Thirumulpad v. Union of India*, (1997) 2 SCC 267

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- a suggested by the CCF, therefore, the MoEF called for a report from the FSI based on satellite imagery and properly analysed by GSI application from the year 2001 onwards (vide Letter dated 17-7-2009 from the Deputy Conservator of Forests (C) to the Director, Forest Survey of India). The FSI gave its report on 7-8-2009 which we shall examine presently. In light of the report of the CCF and the report from the FSI, MoEF in its first response to the applicants' complaint before the CEC (under covering letter that is undated, received at the CEC on 12-8-2009) stated that at the project site "there was a good patch of forests and which *could* be treated as deemed forest". It further said that the report of the FSI showed that the forest cover existed there up to 2006 and the felling of trees might have taken place after that only.

- c 13. In the meeting convened by the CEC on the applicants' complaint on 12-8-2009, the Chief Conservator of Forests (CCF), MoEF, Lucknow stated that the plantation done in the project area was naturalised and having regard to the number of trees that existed in the area, the project area should be seen as "deemed forest" and, therefore, it attracted the provisions of the FC Act, and any non-forest use of the land required prior approval of the Central Government. In view of the stand taken by the CCF, the CEC by its letter of d 13-8-2009 requested the MoEF to give its response on the issue.

- e 14. Here it may be noted that till that stage the stand of the MoEF, based on the reports of the CCF and the FSI, though tentative, seemed to be definitely inclined towards holding that the trees that were felled for clearing the site comprised a forest/deemed forest and the construction at the project site was hit by the provisions of the FC Act. But now in a perceptible shift in its stand the MoEF informed the CEC by its Letter of 22-8-2009/24-8-2009 that in its view, the project site did not attract the provisions of the FC Act. It referred to the order of this Court dated 12-12-1996¹ and pointed out that the project site did not appear in the list of deemed forest land identified by the State Level Expert Committee in pursuance of the order of the Court. It concluded by saying as follows:

- f "In view of the above, it is informed that the area under discussion is neither recorded as forest nor deemed forest and is actually an urban tree park. Therefore, construction work in this area does not attract the provisions of the Forest (Conservation) Act, 1980."

- g 15. The Letter dated 22-8-2009/24-8-2009 from the MoEF was followed by another Letter of 2-9-2009. This was purportedly to put the observation in the previous letter that "... [C]onstruction work in this area does not attract the provisions of the Forest (Conservation) Act, 1980" in context. This letter referred to the satellite images provided by the FSI and the reports submitted by the CCF but in the end, "given the sensitivity of the matter and the high degree of public interest" left it to the CEC to draw appropriate conclusions h from the materials furnished to it.

¹ T.N. Godavarman Thirumulpad v. Union of India, (1997) 2 SCC 267

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16. The CEC on a consideration of all the materials made available to it, including the report of the FSI (on which the applicants heavily rely), came to hold and find that the project site was not a forest or a deemed forest or a forest-like area in terms of the order of this Court dated 12-12-1996¹. In its report to this Court dated 4-9-2009 it observed in this regard as follows:

“28. ... In the present case, even though as per the report of the Forest Survey of India, the area was having good forest/tree cover and the project area had more than 6000 trees, it does not fall in the category of ‘forest’ for the purpose of Section 2 of the Forest (Conservation) Act and therefore does not require any approval under the Forest (Conservation) Act. *The project area does not have naturally grown trees but planted trees. The area has neither been notified as ‘forest’ nor recorded as ‘forest’ in the government record. In the exercise carried out by the State of Uttar Pradesh, after detailed guidelines for identification of deemed forest were laid down, the project area was not identified to be deemed forest.* The CEC does not agree with the Regional Chief Conservator of Forests, MoEF, Lucknow that the plantation done in the area has naturalised because of natural regeneration and therefore now falls in the category of deemed forest. Most of the trees are of species such as subabul, bottle brush, bottle palm, morepankhi, *Ficus benjamina*, *Cassia siamea*, eucalyptus, fishtail palm, rubber plant, silver oak, etc. *which are not of natural regeneration. As such hardly any tree of natural regeneration exists.*”

29. As per the definition of ‘forest’ as held by the Hon’ble Supreme Court in its order dated 12-12-1996, the project area therefore cannot be treated as ‘forest’ for the purpose of the Forest (Conservation) Act.”

(emphasis added)

17. Mr Jayant Bhushan strongly assailed the finding of the CEC as erroneous. The learned counsel stated that the CEC took the view that the project area could not be described as “forest” and did not attract the provisions of the FC Act mainly because the trees in the project area that were cut down for making space for the constructions were planted trees and not naturally grown trees. He contended that the reason given by the CEC was quite untenable being contrary to the judgments of this Court where it is held that forest may be natural or man-made. He further submitted that the view that in order to qualify as forest the trees must be “naturally grown” is fraught with grave consequences inasmuch as a very large portion of the forests in India are planted forests and not original, natural forests. Further, any afforested area would also cease to be recognised as a forest if the view taken by the CEC were to be upheld.

18. The other reasons given by the CEC for holding that the project area was not a forest was that it was neither notified as “forest” nor recorded as “forest” in the government record and even in the exercise carried out by the State of Uttar Pradesh, after detailed guidelines for identification of deemed forest were laid down, the project area was not identified to be deemed forest.

1 T.N. Godavarman Thirumulpad v. Union of India, (1997) 2 SCC 267

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- Mr Bhushan contended that these reasons were as misconceived as the previous one. The area was not notified or recorded as forest meant nothing since this Court had passed a series of orders with the object to bring such areas within the protection of the FC Act that were not notified or recorded as forest. In the same way the failure of the State Level Expert Committee to identify the project area as forest even though it fully satisfied the criterion set by the Committee itself for the purpose will not alter the true nature and character of the area as forest land.

19. Mr K.K. Venugopal, learned Senior Counsel appearing for the State of U.P. strongly supported the view taken by the CEC. The learned counsel submitted that the omission to identify the trees at the project site as forest or deemed forest was not due to any mistake or by chance. He pointed out that in the parameters set out by the State Level Expert Committee for identification of forests or forest-like areas it was clarified that “trees mean naturally grown perennial trees” and it was further stipulated that “the plantation done on public land or private land will not be identified as forest-like area”. Mr Venugopal submitted that the guidelines made by the Expert Committee were reported to this Court and accepted by it on 12-12-2007. The project site clearly did not come within the parameters fixed by the Expert Committee and it was rightly not identified as a forest-like area. The parameters fixed by the Expert Committee for identification of forests or forest-like area were never challenged by anyone and now it was too late in the day to question those parameters, more so after those were accepted by this Court. Mr Venugopal contended that the non-inclusion of the project site as a forest or forest-like area by the State Level Expert Committee should be conclusive of the fact that the area was not forest land and the trees standing there were no forest.

20. Mr Bhushan contended that a tract of land bearing a thick cluster of trees that would qualify as forest land and forest as defined by the orders of this Court would not cease to be so simply because the parameters adopted by the Expert Committee were deficient and inconsistent with this Court’s orders. In support of the submission that there was actually a forest in that area that was cut down for the project he relied upon the report of the FSI dated 7-8-2009 in which the forest cover status at the project site based on IRS 1D/P6 LI88 III data is shown as follows:

Forest Cover Status in the Area of Interest (AOI) of NOIDA from 2001 to 2007							
							Area in ha
Assessment (State of Forest Report)	Date of satellite data (sic)	Very dense forest	Moderately dense forest	Open forest	Total forest cover	Non- forest	Total area
8th (2001)	October 2000	0	3.74	10.42	14.16	32.27	46.43
9th (2003)	November 2002	0	6.05	10.71	18.76	29.67	46.43

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10th (2005)	November 2004	0	7.54	14.23	21.77	24.66	46.43
11th (2007)	October 2006	0	9.04	12.73	21.77	24.66	46.43

21. In the report it was also stated that the latest forest cover assessment by the FSI was based on satellite data of 2006 and it did not have any data of the later period. It further stated that the felling of trees might have taken place after October 2006. Mr Bhushan invited our attention to the order of this Court in *T.N. Godavarman Thirumulpad (98) v. Union of India*² (SCC paras 16, 18, 33, 37, 38) to show that this Court had accepted the reliability of the FSI Report based on satellite imagery.

22. Mr Bhushan also relied upon the report of the CCF, MoEF, Lucknow, a reference to which has already been made above. He also relied upon the first response of the MoEF, where it was stated that at the project site there was a “good patch of forests and which could be treated as a deemed forest” and further that the report of the FSI showed that the forest cover existed there up to 2006 and the felling of trees might have taken place after that only. Mr Bhushan lastly relied upon the Google image which has a dark patch in approximately 1/3rd of the area interpreted by him as a dense cover of trees.

23. In support of the submissions the learned counsel relied greatly on the order passed by this Court on 12-12-1996 in *T.N. Godavarman Thirumulpad*¹. He also relied upon the decisions of this Court in *Samatha v. State of A.P.*³ (SCC paras 119, 120, 121, 123) and *M.C. Mehta v. Union of India*⁴ (SCC paras 55, 56, 57).

24. The point raised by Mr Bhushan may be valid in certain cases but in the facts of the case his submissions are quite out of context. In support of the applicants’ case that there used to be a forest at the project site he relies upon the report of the CCF based on site inspection and the Google image and most heavily on the FSI Report based on satellite imagery and analysed by GSI application. A satellite image may not always reveal the complete story. Let us for a moment come down from the satellite to the earth and see what picture emerges from the government records and how things appear on the ground. In the revenue records, none of the khasras (plots) falling in the project area was ever shown as jungle or forest. According to the settlement year 1359 Fasli (1952 AD) all the khasras are recorded as *agricultural land*, *banjar* (uncultivable) or *parti* (uncultivated).

25. NOIDA was set up in 1976 and the lands of the project area were acquired under the Land Acquisition Act mostly between the years 1980 to

2 (2006) 5 SCC 28

1 *T.N. Godavarman Thirumulpad v. Union of India*, (1997) 2 SCC 267

3 (1997) 8 SCC 191

4 (2004) 12 SCC 118

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- 1983 (two or three plots were notified under Sections 4/6 of the Act in 1979 and one or two plots as late as in the year 1991). But the possession of a very large part of the lands under acquisition (that now form the project site) was taken over in the year 1983. From the details of the acquisition proceedings furnished in a tabular form (Annexure 9 to the counter-affidavit on behalf of Respondents 2 and 3) it would appear that though on most of the plots there were properties of one kind or the other, *there was not a single tree on any of the plots under acquisition*. The records of the land acquisition proceedings, thus, complement the revenue record of 1952 in which the lands were shown as *agricultural and not as jungle or forest*. There is no reason not to give due credence to these records since they pertain to a time when the impugned project was not even in anyone's imagination and its proponents were nowhere on the scene.
- 26.** Further, in the second response of the MoEF, dated 22-8-2009/24-8-2009 there is a reference to the information furnished by the Deputy Horticulture Officer, NOIDA according to which plantations were taken up along with seed sowing of subabul during the years 1994-1995 to 2007-2008. A total of 9480 saplings were planted (including 314 saplings planted before 1994-1995). NOIDA had treated this area as an "urban park". It is, thus, to be seen that on a large tract of land (33.45 ha in area) that was forever agricultural in character, trees were planted with the object of creating an urban park (and not for afforestation!). The trees, thus, planted were allowed to stand and grow for about 12-14 years when they were cut down to make the area clear for the project.
- 27.** The satellite images tell us how things stand at the time the images were taken. We are not aware whether or not the satellite images can ascertain the different species of trees, their age and the girth of their trunks, etc. But what is on record does not give us all that information. What the satellite images tell us is that in October 2006 there was thin to moderately dense tree cover over about half of the project site. But this fact is all but admitted; the State Government admits felling of over 6000 trees in 2008. How and when the trees came up there we have just seen with reference to the revenue and land acquisition proceedings records. Now, we find it inconceivable that trees planted with the intent to set up an urban park would turn into forest within a span of 10 to 12 years and the land that was forever agricultural, would be converted into forest land. One may feel strongly about cutting trees in such large numbers and question the wisdom behind replacing a patch of trees by large stone columns and statues but that would not change the trees into a forest or the land over which those trees were standing into forest land.
- 28.** The decisions relied upon by Mr Bhushan are also of no help in this case and on the basis of those decisions the trees planted in the project area cannot be branded as "forest".

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29. In the order dated 12-12-1996 in *T.N. Godavarman Thirumulpad*¹ this Court held and observed as under: (SCC pp. 269-70, paras 3-4)

“3. It has emerged at the hearing, that there is a misconception in certain quarters about the true scope of the Forest (Conservation) Act, 1980 (for short ‘the Act’) and the meaning of the word ‘forest’ used therein. There is also a resulting misconception about the need of prior approval of the Central Government, as required by Section 2 of the Act, in respect of certain activities in the forest area which are more often of a commercial nature. It is necessary to clarify that position. a

4. The Forest (Conservation) Act, 1980 was enacted with a view to check further deforestation which ultimately results in ecological imbalance; and therefore, the provisions made therein for the conservation of forests and for matters connected therewith, must apply to all forests irrespective of the nature of ownership or classification thereof. The word ‘forest’ must be understood according to its dictionary meaning. This description covers all statutorily recognised forests, whether designated as reserved, protected or otherwise for the purpose of Section 2(i) of the Forest (Conservation) Act. The term ‘forest land’, occurring in Section 2, will not only include ‘forest’ as understood in the dictionary sense, but also any area recorded as forest in the government record irrespective of the ownership. This is how it has to be understood for the purpose of Section 2 of the Act. The provisions enacted in the Forest (Conservation) Act, 1980 for the conservation of forests and the matters connected therewith must apply clearly to all forests so understood irrespective of the ownership or classification thereof. This aspect has been made abundantly clear in the decisions of this Court in *Ambica Quarry Works v. State of Gujarat*⁵, *Rural Litigation and Entitlement Kendra v. State of U.P.*⁶ and recently in the order dated 29-11-1996 (*Supreme Court Monitoring Committee v. Mussoorie Dehradun Development Authority*⁷). The earlier decision of this Court in *State of Bihar v. Banshi Ram Modi*⁸ has, therefore, to be understood in the light of these subsequent decisions. We consider it necessary to reiterate this settled position emerging from the decisions of this Court to dispel the doubt, if any, in the perception of any State Government or authority. This has become necessary also because of the stand taken on behalf of the State of Rajasthan, even at this late stage, relating to permissions granted for mining in such area which is clearly contrary to the decisions of this Court. It is reasonable to assume that any State Government which has failed to appreciate the correct position in law so b
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¹ *T.N. Godavarman Thirumulpad v. Union of India*, (1997) 2 SCC 267

⁵ (1987) 1 SCC 213

⁶ 1989 Supp (1) SCC 504

⁷ (1997) 11 SCC 605

⁸ (1985) 3 SCC 643

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- a far, will forthwith correct its stance and take the necessary remedial measures without any further delay.”

In the above order the Court mainly said three things: one, the provisions of the FC Act must apply to all forests irrespective of the nature of ownership or classification of the forest; two, the word “forest” must be understood according to its dictionary meaning and three, the term “forest land”, occurring in Section 2, will not only include “forest” as understood in the

- b dictionary sense, but also any area recorded as forest in the government record irrespective of the ownership.

30. The order dated 12-12-1996¹ indeed gives a very wide definition of “forest”. But any definition howsoever wide relates to a context. There can hardly be a legal definition, in terms absolute, and totally independent of the context. The context may or may not find any articulation in the judgment or the order but it is always there and it is discernible by a careful analysis of the facts and circumstances in which the definition was rendered. In the order the Court said: (SCC p. 270, para 4)

- c “4. ... The term ‘forest land’ occurring in Section 2, will not only include ‘forest’ as understood in the dictionary sense, *but also any area recorded as forest in the government record irrespective of the ownership.*” (emphasis added) Now what is meant by that is made clear by referring to the earlier decision of the Court in *State of Bihar v. Banshi Ram Modi*⁸.

31. In the earlier decision in *Banshi Ram Modi*⁸ the Court had said: (SCC p. 647, para 10)

- e “10. ... Reading them together, these two parts of the section mean that after the commencement of the Act no fresh breaking up of the forest land or no fresh clearing of the forest on any such land can be permitted by any State Government or any authority without the prior approval of the Central Government. But if such permission has been accorded before the coming into force of the Act and the forest land is broken up or cleared then obviously the section cannot apply.”

- f 32. The observation in *Banshi Ram Modi*⁸ (which again was made in the peculiar context of that case!) was sought to be interpreted by some to mean that once the land was broken in course of mining operations it ceased to be forest land. It was in order to quell the mischief and the subversion of Section 2 of the FC Act that the Court in the order dated 12-12-1996¹ made the observation quoted above in italics.

g 33. In *Samatha*³, this Court was dealing with cases of grant of mining leases to non-tribals in reserved forests and forests that were notified as scheduled area under the Andhra Pradesh Scheduled Areas Land Transfer

- h 1 *T.N. Godavarman Thirumulpad v. Union of India*, (1997) 2 SCC 267
8 (1985) 3 SCC 643
3 *Samatha v. State of A.P.*, (1997) 8 SCC 191

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Regulation, 1959. It was contended on behalf of the leaseholders that the Regulation and the Mining Act do not prohibit grant of mining leases of government land in the scheduled area to non-tribals. The Forest (Conservation) Act or the Andhra Pradesh Forest Act, 1967, does not apply to renewal of leases. The observations in regard to what constitutes a forest made in SCC paras 119, 120, 121 and 123, relied upon by Mr Bhushan, were made when it was sought to be argued by the leaseholders that unless the lands are declared either as reserved forests or forests under the Andhra Pradesh Forest Act, 1967, the FC Act had no application. Hence, there was no prohibition to grant mining lease or to renew it by the State Government. The context in which the Court expanded the definition of forest is, thus, manifest and evident.

34. In *M.C. Mehta v. Union of India*⁴, in the paragraphs relied upon by Mr Bhushan, this Court was considering the question of permitting mining in Aravalli hills where large-scale afforestation was done by spending crores of rupees of foreign funding in an effort to repair the deep ravages caused to the Aravalli hill range over the years by mostly illegal mining. The context is once again evident.

35. Almost all the orders and judgments of this Court defining “forest” and “forest land” for the purpose of the FC Act were rendered in the context of mining or illegal felling of trees for timber or illegal removal of other forest produce or the protection of national parks and wildlife sanctuaries. In the case in hand the context is completely different. Hence, the decisions relied upon by Mr Bhushan can be applied only to an extent and not in absolute terms. To an extent Mr Bhushan is right in contending that a man-made forest may equally be a forest as a naturally grown one. He is also right in contending that non-forest land may also, with the passage of time, change its character and become forest land. But this also cannot be a rule of universal application and must be examined in the overall facts of the case otherwise it would lead to highly anomalous conclusions.

36. Like in this case, Mr Bhushan argued that the two conditions in the guidelines adopted by the State Level Expert Committee i.e. (i) “trees mean naturally grown perennial trees”, and (ii) “the plantation done on public land or private land will not be identified as forest like area” were not consistent with the wide definition of forest given in the 12-12-1996¹ order of the Court and the project area should qualify as forest on the basis of the main parameter fixed by the Committee. If the argument of Mr Bhushan is accepted and the criterion fixed by the State Level Expert Committee that in the plains a stretch of land with an area of 2 ha or above, with the minimum density of 50 trees per hectare would be a deemed forest is applied mechanically and with no regard to the other factors a greater part of Lutyens Delhi would perhaps qualify as forest. This was obviously not the intent of the order dated 12-12-1996¹.

⁴ (2004) 12 SCC 118

¹ *T.N. Godavarma Thirumulpad v. Union of India*, (1997) 2 SCC 267

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37. In the light of the discussion made above, it must be held that the
- a project site is not forest land and the construction of the project without the prior permission from the Central Government does not in any way contravene Section 2 of the FC Act.

The project and the EIA Notification, 2006

- b 38. Mr Jayant Bhushan next contended that the construction of the project was started by the U.P. Government (and was sought to be completed in great haste!) without obtaining the prior environmental clearance from the Central Government or the State Level Environment Impact Assessment Authority in complete violation of the Notification issued by the Central Government on 14-9-2006 under Section 3(3) of the EP Act.

- c 39. Before proceeding to examine the issue in detail it would be useful to see the views taken by the different authorities, agencies and the MoEF on the question whether the law required prior environmental clearance for the project. It appears that once the controversy was raised, the project proponents, by letter dated 24-4-2009 approached the State Level Environment Impact Assessment Authority, Uttar Pradesh constituted under the EIA Notification, 2006, seeking environmental clearance for the project.
- d In reply SEIAA by its letter dated 7-5-2009 stated that having regard to the nature and the area of the project it was not covered by the schedule of Notification No. S.O. 1533(E) dated 14-9-2006 issued by the Government of India.

- e 40. Before the CEC, the MoEF in its first response dated 22-8-2009/ 24-8-2009 took the stand that the project would not require any prior environmental clearance under the EIA Notification, 2006. It further stated that in the EIA Notification, 2006 all building/construction projects/area development projects and townships, were categorised as Category B projects and the “general condition” prescribed in the notification was not applicable to construction projects. It went on to say that the project did not require any prior environmental clearance under the EIA Notification, 2006 even though
- f “being within the prescribed distance from a wildlife sanctuary/national park or inter-State boundary”. It needs to be stated here that the first response of the MoEF before the CEC was evidently based on the inputs received from the U.P. Government about the nature of the project and the extent of constructions involved in it.

- g 41. In the second response before the CEC dated 2-9-2009 the MoEF did not appear so sure of its earlier stand. It stated that after its earlier Letter of 22-8-2009, 24-8-2009, the MoEF had received further information about the project from various sources and the fresh findings raised far-reaching issues of public concern that extended beyond the parameters set by the EIA Notification of 2006. It further stated that the certificate issued by SEIAA of U.P. stated that the total built-up covered area was only 9542 sq m and the
- h report of the CCF was not clear as to the extent of the covered area vis-à-vis concrete landscaping, pillar(s), platform(s), lawn(s), tree planting, etc. To put

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it simply, the MoEF was not fully in possession of the basic facts relating to the project and its likely impact on the environment. It left the decision in the hands of the CEC.

42. The CEC in its report to this Court dated 4-9-2009 held and found that the project was covered by the EIA Notification, 2006 and it required prior environmental clearance in terms of the notification. In its report, the CEC observed as follows:

“30. The CEC does not agree with the stand taken by the State Government as well as the MoEF that the project does not require environmental clearance in terms of the MoEF Notification dated 14-9-2006. The MoEF, as well as the State of Uttar Pradesh have taken this view primarily on the ground that the built-up area of the project is less than 20,000 sq m and therefore the project does not require environmental clearance. The built-up area has been calculated by the State of Uttar Pradesh on the basis of its building bye-laws. The CEC is of the view that for the purpose of environmental clearance, the building bye-laws of the State Government have no relevance at all. As per the details provided by the State Government itself, out of 33.43 ha of the project area, 3499.50 sq m is being used for memorial building and toilet blocks, 3500 sq m is being used for utilities and facilities, 1,29,140.80 sq m area is being used for hard landscape including for platforms, plinth, sculptures and surrounded paved area, path, etc. Another 34,850 sq m area is to be used for vehicular movement. The above comes to more than 50% of the project area which in CEC’s view qualify to be included in the activity area. The project cost is about ₹685 crores. As per the MoEF Notification dated 14-9-2006, for building/construction project, in the case of facilities open to the sky, the activity area is to be included in the built-up area. In the present case, after including the activity area the total built-up area, for the purpose of environmental clearance, far exceeds the threshold limit of 20,000 sq m of built-up area provided in the notification. The MoEF, on its own admission, has merely relied on the details of the built-up area as provided by the State Government without independently verifying it and has not included the area falling in the category of activity area. In any case, even if there was any doubt in the MoEF regarding the applicability of the environmental clearance in the present case, in view of precautionary principle it should have erred on the side of the caution and should have insisted for the environmental clearance.”

43. When the matter finally came up before the Court the MoEF was once again asked to take a clear stand on the issue whether the project was covered by the EIA Notification, 2006. The MoEF filed a brief affidavit on 21-10-2009 in which it acknowledged that the CEC in its report dated 4-9-2006 had stated that the State of U.P. should be directed to seek environmental clearance for the project from the MoEF in terms of the notification. The MoEF, however, reiterated its stand in very definite and unequivocal terms that the project in question did not fall within the ambit of

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- a the EIA Notification, 2006 and no environmental clearance was required for such kind of projects. The stand of the MoEF was based on the premise that the area of the project (33.43 ha) was less than 50 ha and its built-up area (9542 sq m) was less than 20,000 sq m. Having thus made its stand clear, the MoEF went on to say that in case the Court desired the project to be appraised from the environmental angle it would do so and submit its recommendations. It, however, put in a caveat that such appraisals were made
- b before the commencement of the construction activity at the site and in the present case the project was already in the advanced stage of construction.

44. On 22-4-2010⁹, this Court passed an order in which after extracting the relevant passage from the affidavit it directed the MoEF to make a study of the environmental impact of the project. The MoEF was further directed to suggest measures for undoing the environmental degradation, if any, caused
- c by the project and the amelioration measures to safeguard the environment, with particular reference to the adjacent bird sanctuary.

45. As directed by the Court, the MoEF asked the project proponents to submit the details concerning the project in the format prescribed under the EIA notification. It also asked the project proponents to have the environmental impact assessment of the project done by some expert
- d agencies. As required by the MoEF, NOIDA submitted the requisite details concerning the project and the reports on the environmental impact assessment of the project based on studies made by three different agencies (we shall have the occasion to consider those reports in the latter part of the judgment). Thereafter, the Expert Appraisal Committee (EAC) constituted by the Central Government for the purpose of the EIA notification examined the
- e project in its 88th meeting held on 28-6-2010, 29-6-2010 and gave its report which is brought on record along with an affidavit filed by the State Government on 22-7-2010. In this report the EAC made as many as 15 recommendations to check any environmental degradation or any harm to the Okhla Bird Sanctuary by the project.

- f 46. The MoEF filed yet another affidavit before the Court on 19-8-2010 in which it tried to explain the distinction between Clauses 8(a) and 8(b) in the schedule to the EIA Notification, 2006 without changing its stand that the project in question did not come within the ambit of the notification.

47. In course of the oral hearing as well, Mr Raval, learned ASG, firmly maintained that the project did not come under the notification and no prior environmental clearance was required for it under the notification.

- g 48. Mr Harish Salve, learned amicus curiae and Mr Jayant Bhushan, counsel appearing for the applicants, both staunchly contended that the stand of the MoEF was patently wrong and incorrect. The project clearly fell within the ambit of the EIA Notification, 2006. The CEC had taken the correct view on the issue. And to start the construction of the project and take
- h it into an advanced stage of construction without obtaining prior

⁹ T.N. Godavarman Thirumulpad v. Union of India, (2010) 6 SCC 747

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environmental clearance from the Central Government was in blatant violation of the provisions of the notification. Mr Salve also criticised the Central Government for taking a shifting and inconsistent stand on the issue. a

49. Now is the time to take a closer look at the provisions of EIA Notification No. S.O. 1533(E) dated 14-9-2006 issued by the Central Government under Section 3(3) of the EP Act and to consider the submissions advanced by the two sides on that basis. Section 3(3) of the EP Act provides as follows:

“3. *Power of Central Government to take measures to protect and improve environment.*—(1)-(2) * * *

(3) The Central Government may, if it considers it necessary or expedient so to do for the purposes of this Act, by order, published in the Official Gazette, constitute an authority or authorities by such name or names as may be specified in the order for the purpose of exercising and performing such of the powers and functions (including the power to issue directions under Section 5) of the Central Government under this Act and for taking measures with respect to such of the matters referred to in sub-section (2) as may be mentioned in the order and subject to the supervision and control of the Central Government and the provisions of such order, such authority or authorities may exercise the powers or perform the functions or take the measures so mentioned in the order as if such authority or authorities had been empowered by this Act to exercise those powers or perform those functions or take such measures.” c
d

50. In exercise of the powers conferred by the above provision the Central Government in the Ministry of Environment and Forests issued Notification No. S.O. 1533(E) on 14-9-2006, which insofar as relevant for the present is reproduced below: e

“MINISTRY OF ENVIRONMENT AND FORESTS
Notification

New Delhi, the 14th September, 2006

S.O. 1533(E).—Whereas * * *
And whereas * * *
And whereas * * * f

2. *Requirements of prior environmental clearance (EC).*—The following projects or activities shall require *prior environmental clearance* from the regulatory authority concerned, which shall hereinafter be referred to as the Central Government in the Ministry of Environment and Forests for matters falling under Category A in the schedule and at State level the State Environment Impact Assessment Authority (SEIAA) for matters falling under Category B in the said schedule, before any construction work, or preparation of land by the project management except for securing the land, is started on the project or activity: g

(i) All new projects or activities listed in the schedule to this notification; h

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a (ii) Expansion and modernisation of existing projects or activities listed in the schedule to this notification with addition of capacity beyond the limits specified for the sector concerned, that is, projects or activities which cross the threshold limits given in the schedule, after expansion or modernisation;

(iii) Any change in product mix in an existing manufacturing unit included in schedule beyond the specified range.

b 3. * * *

4. *Categorisation of projects and activities.*—

(i) All projects and activities are broadly categorised into two categories — Category A and Category B, based on the spatial extent of potential impacts and potential impacts on human health and natural and man-made resources;

c (ii) All projects or activities included as Category A in the schedule, including expansion and modernisation of existing projects or activities and change in product mix, shall require prior environmental clearance from the Central Government in the Ministry of Environment and Forests (MoEF) on the recommendations of an Expert Appraisal Committee (EAC) to be constituted by the Central Government for the purposes of this notification;

d (iii) All projects or activities included as Category B in the schedule, including expansion and modernisation of existing projects or activities as specified in sub-para (ii) of Para 2, or change in product mix as specified in sub-para (iii) of Para 2, but excluding those which fulfil the general conditions (GC) stipulated in the schedule, will require prior environmental clearance from the State/Union Territory Environment Impact Assessment Authority (SEIAA). SEIAA shall base its decision on the recommendations of a State or Union Territory level Expert Appraisal Committee (SEAC) as to be constituted for in this notification. In the absence of a duly constituted SEIAA or SEAC, a Category B project shall be treated as a Category A project;

e 5.-6. * * *

7. *Stages in the prior environmental clearance (EC) process for new projects.*—

g (i) * * *

h I. *Stage (1) Screening:* In case of Category B projects or activities, this stage will entail the scrutiny of an application seeking prior environmental clearance made in Form 1 by the State level Expert Appraisal Committee (SEAC) concerned for determining whether or not the project or activity requires further environmental studies for preparation of an environmental impact assessment (EIA)

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for its appraisal prior to the grant of environmental clearance depending upon the nature and location specificity of the project. The projects requiring an environmental impact assessment report shall be termed Category B1 and remaining projects shall be termed Category B2 and will not require an environment impact assessment report. For categorisation of projects into B1 or B2 except Item 8(b), the Ministry of Environment and Forests shall issue appropriate guidelines from time to time.

8.-12.

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SCHEDULE

(See Paras 2 and 7)

List of Projects or Activities Requiring Prior Environmental Clearance

Project or Activity		Category with threshold limit		Conditions if any
		A	B	
8		Building/Construction projects/Area development projects and Townships		
(1)	(2)	(3)	(4)	(5)
8(a)	Building and construction projects		≥ 20,000 sq m and < 1,50,000 sq m of built-up area *	* (built-up area for covered construction; in the case of facilities open to the sky, it will be the activity area)
8(b)	Townships and area development projects.		Covering an area ≥ 50 ha and or built-up area ≥ 1,50,000 sq m **	** All projects under Item 8(b) shall be appraised as Category B1

Note:

General condition (GC):

Any project or activity specified in Category B will be treated as Category A, if located in whole or in part within 10 km from the boundary of: (i) Protected areas notified under the Wildlife (Protection) Act, 1972; (ii) Critically polluted areas as notified by the Central Pollution Control Board from time to time; (iii) Notified eco-sensitive areas; (iv) inter-State boundaries and international boundaries.

Specific condition (SC):

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*

(I) Basic information

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(II) Activity

- a 1. Construction, operation or decommissioning of the project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

b	Sl. No.	Information/checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
c	1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)		
d	1.2	Clearance of existing land, vegetation and buildings		
e	1.3	Creation of new land uses		
	1.4	Pre-construction investigation e.g. bore houses, soil testing		
	1.5	Construction works		
	1.6	* * *		
	1.31	* * *		

- f 51. In substance the EIA notification provides that all projects and activities enumerated in its schedule would require prior environmental clearance before any construction work or preparation of land for the project is started on the project or activity. The projects and activities depending upon various factors such as the potential hazard to environment, location, the extent of area involved, etc. are categorised in Categories A or B. For projects or activities falling in Category A, the competent authority to grant prior environmental clearance is the MoEF and for projects or activities falling in Category B, the State Environment Impact Assessment Authority (SEIAA). The constitution of SEIAA is provided for in Clause 3 of the notification with which we are not concerned in this case. In certain cases a project or activity, though categorised in Category B may be treated as Category A by application of the general condition [on account of its location being within a distance of 10 km from a protected area notified under the
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Wildlife (Protection) Act, etc.]. In other words, if a project or activity attracts the general condition, the competent authority to grant prior environmental clearance in that case would be the Central Government, even though, the project or activity may figure in the schedule in Category B. a

52. Further, projects or activities categorised as Category B may or may not require an environmental impact assessment before the grant of environmental clearance depending on the nature and location specificity of the project. The projects requiring an EIA report shall be termed as Category B1 and the remaining shall be termed as B2 and will not require an EIA report. For categorisation of projects into B1 and B2, the MoEF would issue appropriate guidelines from time to time. The schedule to the notification has a table that is divided into five columns. The first column contains the serial numbers, and the second the description of the project or activities; the third column lists those projects or activities that fall in Category A and the fourth, those falling in Category B; the fifth column against each item indicates whether any general or specific condition applies to the project or activity described in that item. In some cases where the project or the activity is shown in Column 4 as Category B, the application of the general condition is expressly indicated in Column 5 of the table. b
c

53. For the project under consideration, the relevant entries in the schedule are Items 8(a) and 8(b). Both Items 8(a) and 8(b) are listed in Column 4 i.e. in Category B. In Column 5, against any of the two items, there is no mention of application of the general condition but it is expressly said that all projects in Item 8(b) would be appraised as Category B1, that is to say, for a project under Item 8(b) the prior environmental clearance must be preceded by an environmental impact assessment. d

54. Item 8(a) deals with building and construction projects and the threshold mark that would bring the project within the ambit of the notification is equal to or more than 20,000 sq m and less than 1,50,000 sq m of “built-up area”. It is further clarified that the aforementioned figures relate to built-up area for covered construction; in case of facilities open to the sky, the built-up area would be the activity area. Item 8(b) deals with townships and area development projects and the threshold mark for the project to come within the ambit of the notification is an area equal to or more than 50 ha or built-up area of more than 1,50,000 sq m. e
f

55. Mr Jayant Bhushan, supported by the amicus curiae forcibly argued that the project under consideration would clearly fall under Item 8(a) of the schedule. He submitted that though the area of covered construction in the project was only 6999.50 sq m, the project by its very nature provided facilities open to the sky and in that case, the whole of the activity area would constitute the built-up area. He then referred to the definition of activity [that includes (i) permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan), (ii) clearance of existing land, vegetation and buildings, (iii) creation of new land uses, and (iv) pre-construction investigations e.g. bore houses, soil testing]. He contended that in view of the definition of g
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a activity, virtually the entire area of 33.43 ha from where over 6000 trees were removed for clearing the project site would come within the “activity area” and would, thus, form the built-up area under Item 8(a) of the schedule.

b 56. Further, since the project was located adjacent to the Okhla Bird Sanctuary, it would, without doubt, attract the general condition which provided that any project or activity specified in Category B will be treated as Category A, if located within 10 km from the boundary of protected areas notified under the Wildlife (Protection) Act, 1972. Mr Bhushan insisted that the general condition would apply to the project by virtue of its very close proximity to the Okhla Bird Sanctuary, regardless of the fact that in Column 5 of the table there is no mention of application of the general condition against Item 8(a). The application of the general condition would take the project out of Category B and put it in Category A for which the competent authority to grant prior environmental clearance is the MoEF.

c 57. Mr Bhushan then referred to the Office Memo dated 2-12-2009 issued by the MoEF which in the course of hearing was, in all fairness, produced by Mr Raval, learned ASG, appearing for the MoEF. The office memorandum inter alia provides that “... while granting environmental clearance to projects involving forest land, wildlife habitat (core one of elephant/tiger reserve, etc.) and/or located within 10 km of the national park/ wildlife sanctuary (at present the distance of 10 km has been taken in conformity with the order dated 4-12-2006 in *Goa Foundation v. Union of India*¹⁰), a specific condition shall be stipulated that the environmental clearance is subject to their obtaining prior clearance from forestry and wildlife angle including clearance from the Standing Committee of the National Board for Wildlife as applicable.....”. Mr Bhushan submitted that the project under consideration thus does not only require a prior environmental clearance but also a clearance from the forestry and wildlife angle including clearance from the Standing Committee of the National Board for Wildlife as precondition for the grant of environmental clearance by the MoEF.

d 58. Mr Bhushan’s arguments proceed in four steps. He first puts the project in Item 8(a) of the schedule as a building and construction project. Then, in the second step, in order to cross the threshold marker he refers to the definition of “activity” to contend that since the project provides facilities open to sky its entire area of 33.43 ha would constitute the built-up area. In the third step, he brings in the general condition [even though in regard to Item 8(a) its application is not mentioned in Column 5 of the table] that would make the Central Government as the competent authority for granting prior environmental clearance for the project. And lastly, in the fourth step he refers to the Office Memorandum dated 2-12-2009 to contend that a clearance from the Standing Committee of the National Board for Wildlife was a precondition for the grant of the prior environmental clearance by the MoEF.

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59. Long and elaborate submissions were made from both sides in regard to the application of the general condition to this project. Mr Venugopal, Senior Counsel appearing for the State of U.P. and Mr Raju Ramachandran, Senior Counsel appearing for NOIDA submitted that the general condition would have no application to projects under Items 8(a) or 8(b) for the simple reason that in regard to those items there was no mention of the general condition in Column 5 of the table. Mr Venugopal submitted, and not entirely without substance that if the general condition were to apply to Items 8(a) and 8(b) without being mentioned in Column 5 of the table then it would not make any sense to expressly mention it in Column 5 in respect of some other projects and activities classified in Category B in the schedule.

60. Mr Raval, learned ASG, produced before the Court, the draft Notification No. S.O. 1324E, published in the Gazette of India Extraordinary of 15-9-2005. In the draft notification there were two general conditions, GC1 and GC2 and in regard to “(a) Construction of all projects (residential and non-residential), and (b) New Townships and Settlement Colonies”, the application of GC2 was expressly indicated in Column 5 of the table. Later on, in a meeting held on 6-7-2006, chaired by none else than the Prime Minister, it was decided to leave all construction and township projects, housing and area development projects in the hands of the State Government. It was further decided that for all projects involving more than 1,50,000 sq m of built-up area and/or covering more than 50 ha, the EIA requirements should correspond to Category A, even though the clearance would be granted by the State Government. Mr Raval submitted that in light of the decision taken in that meeting, in the final Notification issued on 14-9-2006, the application of general condition was removed in respect of Items 8(a) and 8(b) in the schedule. In view of the changes made in the two items in the final notification, Mr Raval also contended that the general condition has no application to Items 8(a) and 8(b), regardless of the project’s proximity to any sanctuary or reserved area.

61. But before considering the latter three limbs of Mr Bhushan’s arguments it is necessary to examine whether the project in question can be legitimately categorised as a building and construction project falling under Item 8(a) of the schedule which is the first premise of his arguments. In the schedule to the notification “building and construction projects” and “townships and area development projects” are enumerated separately, the former in Item 8(a) and the latter in Item 8(b). This would normally suggest that the notification treats those two kinds of projects separately and differently. It would, therefore, be reasonable to say that an “area development project” though involving a good deal of construction would yet not be a “building and construction project”.

62. When it was pointed out to Mr Bhushan that the project in question may be put more appropriately in Category 8(b) as an “area development project” rather than a “building and construction project” under Category 8(a), in reply he took a line that nullifies any distinction between the two. Mr Bhushan submitted that so far as construction projects are concerned there is

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- a no qualitative difference between Items 8(a) and 8(b) and the difference between the two items was only quantitative. Projects were categorised under Items 8(a) or 8(b) as “building and construction projects” or “townships and area development projects” not on the basis of their nature and character but depending upon the extent of construction. The learned counsel pointed out that the upper limit under Item 8(a) (1,50,000 sq m of built-up area) was the threshold mark under Item 8(b) and contended that this was a clear indication that projects with built-up area up to 1,50,000 sq m would be defined as “building and construction projects” and projects with built-up area in excess of 1,50,000 sq m would be categorised as “townships and area development projects”.

- b 63. In support of the contention, Mr Bhushan gave the example of a “building and construction project”, consisting of a number of multi-storied buildings, the aggregate of the built-up area of which exceeds 1,50,000 sq m. Mr Bhushan submitted that since the total built-up area of the project crosses the upper limit of Item 8(a) the project would not fall within that item. But at the same time since the project is a “building and construction project” and not a “township and area development project”, it would not come under Item 8(b) and this would be indeed a highly anomalous position where a project with a smaller built-up area would fall within the ambit of the notification, whereas a project with a larger built-up area would escape the rigours of the notification.

- c 64. The amicus, also arguing in the same vein, submitted that as far as building and construction projects are concerned there was no qualitative difference in Items 8(a) and 8(b) of the schedule to the notification. A combined reading of the two clauses of Item 8 of the schedule would show the continuity in the two provisions; 1,50,000 sq m of built-up area that was the upper limit in Item 8(a) was the threshold marker in Item 8(b). This clearly meant that building and construction projects with built-up area/activity area between 20,000 sq m to 1,50,000 sq m would fall in Category 8(a) and projects with built-up area of 1,50,000 sq m or more would fall in Category 8(b). The amicus further submitted that though it was not expressly stated, the expression “built-up area” in Item 8(b) must get the same meaning as in Item 8(a), that is to say, if the construction had facilities open to sky the whole of the “activity area” must be deemed to constitute the “built-up area”.

- d 65. It is extremely difficult to accept the contention that the categorisation under Items 8(a) and 8(b) has no bearing on the nature and character of the project and is based purely on the built-up area. A building and construction project is nothing but addition of structures over the land. A township project is the development of a new area for residential, commercial or industrial use. A township project is different *both quantitatively and qualitatively* from a mere building and construction project. Further, an area development project may be connected with the township development project and may be its first stage when grounds are cleared, roads and

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pathways are laid out and provisions are made for drainage, sewage, electricity and telephone lines and the whole range of other civic infrastructure. Or an area development project may be completely independent of any township development project as in case of creating an artificial lake, or an urban forest or setting up a zoological or botanical park or a recreational, amusement or a theme park. a

66. The illustration given by Mr Bhushan may be correct to an extent. Constructions with built-up area in excess of 1,50,000 would be huge by any standard and in that case the project by virtue of sheer magnitude would qualify as township development project. To that limited extent there may be a quantitative correlation between Items 8(a) and 8(b). But it must be realised that the converse of the illustration given by Mr Bhushan may not be true. For example, a project which is by its nature and character an “area development project” would not become a “building and construction project” simply because it falls short of the threshold mark under Item 8(b) but comes within the area specified in Item 8(a). The essential difference between Items 8(a) and 8(b) lies not only in the different magnitudes but in the difference in the nature and character of the projects enumerated thereunder. b
c

67. In light of the above discussion it is difficult to see the project in question as a “building and construction project”. Applying the test of “dominant purpose or dominant nature” of the project or the “common parlance” test i.e. how a common person using it and enjoying its facilities would view it, the project can only be categorised under Item 8(b) of the schedule as a township and area development project”. But under that category it does not come up to the threshold marker inasmuch as the total area of the project (33.43 ha) is less than 50 ha and its built-up area even if the hard landscaped area and the covered areas are put together comes to 1,05,544.49 sq m i.e. much below the threshold marker of 1,50,000 sq m. The inescapable conclusion, therefore, is that the project does not fall within the ambit of the EIA Notification S.O. 1533(E) dated 14-9-2006. This is not to say that this is the ideal or a very happy outcome but that is how the notification is framed and taking any other view would be doing gross violence to the scheme of the notification. d
e
f

68. Since it is held that the project does not come within the ambit of the notification, the other three arguments based on the activity area, the application of general condition and the application of the Office Memorandum dated 2-12-2009 become irrelevant and need not be gone into in this case. g

The project and the Okhla Bird Sanctuary

69. Mr Bhushan next raised the issue of the project being located virtually adjoining the Okhla Bird Sanctuary. The very close proximity of the project site to the bird sanctuary actually raises issues of serious concern and poses a dilemma. On the one hand the project proponents cannot be said to have broken any law or violated a definite order or direction of the court but h

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a on the other hand the project may possibly cause serious and irreparable harm to the bird sanctuary.

b **70.** Before the CEC the State Government took the plea that the project area was situated well outside the boundaries of the bird sanctuary and the construction of the project had caused no adverse impact on the sanctuary. It was further stated that NOIDA which was the project proponent was equally conscious about its responsibility in regard to the preservation and conservation of the habitat of the sanctuary. A management plan for the sanctuary was being prepared by the Wildlife Institute of Dehradun for which NOIDA had released ₹17,35,350.00 in favour of the Institute and NOIDA was also planning to set up a corpus for the scientific and effective implementation of the management plan.

c **71.** On this issue the MoEF in its responses before the CEC put the blame squarely on the State Government. It stated that despite its letter of 27-5-2005 followed by a number of reminders the Government of Uttar Pradesh did not submit its proposal for declaration of “eco-sensitive zone” around the sanctuaries and national parks. It further stated that the State Government failed to take any steps in this regard even after the order of this
d Court passed on 4-12-2006¹⁰ in Writ Petition (Civil) No. 460 of 2004 by which the MoEF was directed to give all the States final opportunity to send their proposals for declaration of “eco-sensitive zones” to the MoEF within four weeks. The MoEF made the accusation that in the case of the present project the State Government of Uttar Pradesh was trying to take advantage of its own omission. In its second response dated 22-8-2009, 24-8-2009,
e however, the MoEF, though still blaming the U.P. Government for its failure to notify the “eco-sensitive zones” conceded that “till eco-sensitive zone is declared the construction work did not seem to violate any law/Act”. But it went on to say that having regard to its location the project was better suited to be made part of extension of the bird sanctuary.

f **72.** The State Government of Uttar Pradesh took the stand that no proposals were sent from its side because the MoEF failed to issue the necessary guidelines for the purpose. On behalf of the State of U.P., reference was made to a meeting called by the Director General of Forests and Special Secretary, MoEF on 13-5-2010. In that meeting it was decided that the Director General of Forests, MoEF would constitute a committee of officers to finalise the guidelines for declaration of eco-sensitive zones. A reference
g was also made to a subsequent meeting held on 4-7-2010 at Lucknow in which the attention of the Government of India was drawn to the decision taken in the earlier meeting. Yet, no guidelines were issued by the Government of India so far.

h **73.** The CEC in its report to the Court dated 4-9-2009 put the blame on the State Government of U.P. for its omission to identify the eco-sensitive

10 *Goa Foundation v. Union of India*, WP (C) No. 460 of 2004 order dated 4-12-2006

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zones but like the MoEF seemed to accept that in the absence of a decision/ notification there was no legal bar against the construction of the project on the ground that it was sited adjacent to the bird sanctuary. In its report to the Court, the CEC observed as follows:

32. The issue regarding identification/notification of eco-sensitive zones around the national park and sanctuaries is presently pending for consideration before this Hon'ble Court. The National Board of Wildlife (NBWL) had earlier decided that area within 10 km around national parks/sanctuaries should be the eco-sensitive zone. Later on, it was decided by NBWL that eco-sensitive zone should be specific to each national park/sanctuary. The CEC had recommended that 500 m around national park/sanctuary should be declared as eco-sensitive zone. The recommendation of the CEC has not so far been accepted by the Hon'ble Supreme Court after the learned amicus curiae took a view that 500 m may not be adequate. Pursuant to this Hon'ble Supreme Court's order dated 4-8-2006¹¹ in the TWP matter, mining is presently prohibited up to a distance of one kilometre from the boundary of national parks/sanctuaries. For other projects, no restriction has so far been imposed. The MoEF has time and again requested the States/UTs to identify the eco-sensitive zones around the national parks/sanctuaries. However, the State of Uttar Pradesh has so far not prepared any proposal in this regard. *The CEC is of the view that in the absence of a decision/ notification, presently there is no legal restriction against the implementation of the project on the ground that the project is adjacent to the Okhla Bird Sanctuary.*

33. However, it has to be borne in mind that the project area is hardly at a distance of 50 m from the Okhla Bird Sanctuary and that in all probability the project site would have fallen in the eco-sensitive zone, had a timely decision in this regard been taken by the State Government/MoEF. (emphasis added)

74. The report of the CEC succinctly sums up the situation. Though everyone, excepting the project proponents, view the construction of the project practically adjoining the bird sanctuary as a potential hazard to the sensitive and fragile ecological balance of the sanctuary there is no law to stop it. This unhappy and anomalous situation has arisen simply because despite directions by this Court the authorities in the Central and the State Governments have so far not been able to evolve a principle to notify the buffer zones around sanctuaries and national parks to protect the sensitive and delicate ecological balance required for the sanctuaries. But the absence of a statute will not preclude this Court from examining the project's effects on the environment with particular reference to the Okhla Bird Sanctuary. For, in the jurisprudence developed by this Court environment is not merely a statutory issue. Environment is one of the facets of the right to life

11 T.N. Godavarman Thirumulpad v. Union of India, (2010) 13 SCC 740

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a guaranteed under Article 21 of the Constitution¹². Environment is, therefore, a matter directly under the Constitution and if the Court perceives any project or activity as harmful or injurious to the environment it would feel obliged to step in. The question of the likelihood of the project causing any adverse effects on the Okhla Bird Sanctuary must, therefore, be examined from this angle.

b 75. We may note here that Mr Venugopal presented before us some photographs trying to show the situation on the western boundary of the Okhla Bird Sanctuary at its Delhi end. In the photographs there is a road, about forty to sixty feet wide (the Kalindikunj-Irrigation Colony-Batla Road) running right next to the wire mesh fencing of the sanctuary. Next to the road is a long row of cheek by jowl concrete structures/houses that seem to lean against one another. The road has the bustling traffic of Delhi where all kinds of vehicles (and cattle!) appear jostling for space. The situation on the western boundary of the sanctuary is indeed deplorable but that is no reason to strangle the sanctuary from the NOIDA side as well.

d 76. Earlier in the judgment, it is noted that on 22-4-2010⁹, the Court had asked the MoEF to make a study of the environmental impact of the project and to suggest measures for undoing the environmental degradation, if any, caused by the project and the amelioration measures to safeguard the adjacent bird sanctuary. In pursuance of the Court's directions the MoEF had asked the project proponents to have the environmental impact assessment of the project done by some expert agencies. NOIDA, the project proponent got three studies made of the impact assessment of the project. One is a joint study prepared by the Salim Ali Centre for Ornithology and Natural History (SACON), Deccan Regional Station, Hyderabad and the All-India Network Project on Agricultural Ornithology, Acharya N.G. Ranga Agricultural University, Hyderabad (Annexure II of the paper book Vol. IV); the other by the Wildlife Institute of India (WII) (Annexure III of the paper book Vol. IV); and the third by a group of three individuals that was vetted by the Indian Institute of Technology, New Delhi (Annexure IV of the paper book Vol. IV).

f 77. SACON, in its report practically gave a clean chit to the project and made the following observations in connection with the felling of trees and the impact of the project construction on the Okhla Bird Sanctuary:

g 12 *M.C. Mehta v. Union of India*, (1986) 2 SCC 176 : 1986 SCC (Cri) 122 : AIR 1987 SC 965; *M.C. Mehta v. Union of India*, (1987) 4 SCC 463; *M.C. Mehta v. Union of India*, (1988) 1 SCC 471 : 1988 SCC (Cri) 141 : AIR 1988 SC 1115; *Chhetriya Pardushan Mukti Sangharsh Samiti v. State of U.P.*, (1990) 4 SCC 449 : AIR 1990 SC 2060; *Subhash Kumar v. State of Bihar*, (1991) 1 SCC 598 : AIR 1991 SC 420; *Virender Gaur v. State of Haryana*, (1995) 2 SCC 577; *B.L. Wadehra (Dr.) v. Union of India*, (1996) 2 SCC 594; *Vellore Citizens' Welfare Forum v. Union of India*, (1996) 5 SCC 647 : AIR 1996 SC 2715; *A.P. Pollution Control Board v. Prof. M.V. Nayudu*, (1999) 2 SCC 718; *Narmada Bachao Andolan v. Union of India*, (2000) 10 SCC 664; *T.N. Godavarman Thirumulpad v. Union of India*, (2002) 10 SCC 606; *Ramji Patel v. Nagrik Upbhokta Marg Darshak Manch*, (2000) 3 SCC 29 and *State of M.P. v. Kedia Leather & Liquor Ltd.*, (2003) 7 SCC 389 : 2003 SCC (Cri) 1642

h 9 *T.N. Godavarman Thirumulpad v. Union of India*, (2010) 6 SCC 747

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- The Okhla Bird Sanctuary is primarily an urban wetland and supports primarily water birds, majority of them migrating and using in the winter season. These are confined to the water bodies and peripheral marshy vegetation and were not nesting or roosting on the trees of the adjacent parks. The extent of terrestrial habitat in the sanctuary is very small or insignificant. a
- The entire development works including removal of trees and construction had taken place outside the boundary of the sanctuary and the construction and felling of trees in the project site has not altered or interfered with the wetland ecosystem of the OBS and the area was undisturbed. b
- The birds in the wetland of Okhla Bird Sanctuary are estimated during the month of January by the Wildlife Wing of the U.P. Forest Department during winter, which is the period for the migratory birds. The estimation of birds are as under: c

2007-2008	:	17,111
2008-2009	:	21,272
2009-2010	:	22,004
- The clearing of the project site for construction and landscaping was started in the month of January 2008 and continued till 9-10-2009. The bird estimates during migratory season clearly show that there has been no reduction in the number of birds in the sanctuary despite developmental activities in the park. This clearly shows that the construction and felling of trees in the project site has no impact on OBS. d
- It appears that the existence of high tension line along the boundary wall of the project site before the start of the project might have been a barrier for movement of the birds from OBS as high electromagnetic influence would restrict the movement of birds. Hence, the construction and the felling of trees in the project site has minimal influence on the OBS. e

In view of the above, we are of the opinion that felling of trees and construction have no perceptible impact on the OBS habitat.” f

SACON suggested certain proactive environmental measures (see paper book Vol. IV, p. 110) that would form part of this judgment.

78. The other report by the Wildlife Institute of India (WII) is not so sanguine about the project’s impact on the bird sanctuary. In the WII Report under the heading “Assessment of the Impact” it was observed as under: g

“... From this, it is concluded that the erstwhile woodland would have been used by 51-101 species of terrestrial birds and was an extended habitat for the wildlife of the Okhla Bird Sanctuary, primarily terrestrial birds. Some of these birds may be using the erstwhile woodland for breeding as well....” h

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- a ... The erstwhile woodland was acting as a buffer against these disturbances. The project area which was in continuation with the vegetation along the left afflux bund was providing a green belt approximately 2 km long and 218 m wide on an average. Before the felling of trees this patch might have acted as a protective green belt of approximately 190 m width with a tree density of 203.5 trees/ha (density of trees felled) which is now reduced to approximately 28 m (between the western wall of the project and OBS boundary of left afflux dam).
b From this it is concluded that the sanctuary lost its buffer of around 33.43 ha that will have significant impact on the OBS and its tranquillity....

- c ... Such carbon sequestration value of the erstwhile woodland was lost, though NOIDA has already taken up ameliorative steps in the form of afforestation in and around the project site....
... With the loss of buffer and increased artificial light at the project site, it is likely that the migratory bird population may get affected in long run. Bird friendly diffused light with blue tinge may reduce the negative impacts, though much research on this aspect is required.”

- d WII also suggested certain mitigation measures (see paper book Vol. IV, p. 134) that would form part of this judgment.

- e **79.** IIT, New Delhi in its review of the report prepared by the group of three people does not record any serious negative finding in regard to the effects that the project may have on the sanctuary. Finally, the Expert Appraisal Committee (EAC) constituted by the Government of India, MoEF in its 88th meeting held on 28-6-2010, 29-6-2010, reviewed the project in question in the light of the aforementioned reports and made a number of recommendations (paper book Vol. III, p. 32) that would form part of this judgment.

- f **80.** It is significant to note that none of the expert bodies has taken the view that the project is so calamitous or ruinous for the bird sanctuary that it needs to be altogether scrapped in order to save the sanctuary. The expert bodies have given recommendations which allow the completion of the project subject to certain conditions. On behalf of the State of U.P. it is unequivocally stated that all the conditions laid in the reports of the expert bodies are acceptable to the State Government/NOIDA in their entirety. In the light of the two study reports and the report submitted by the EAC, we see no justification for directing the demolition of the constructions made in the project, as prayed for on behalf of the applicants. We would rather allow the project to be completed, subject, of course to the conditions suggested by the three expert bodies and further subject to the directions contained hereinbelow.
g

- h **81.** It may be noted that the report of WII has focused on the felling of trees resulting in the disappearance of the woodland that acted as a protective buffer for the bird sanctuary and its first recommendation is to compensate the loss of vegetation. It has secondly focused on the increased artificial light

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at the project site, which is likely to affect the migratory bird population in the long run. Apart from this, we feel that the extent of stone and concrete constructions in the name of “hard landscaping” is highly out of proportion. In the modified layout plan, the project proponents have reduced the area under hard surface to 35.54% of the total project area. In our opinion, even that is unacceptable from the environmental point of view. The area under hard surface, whether covered, uncovered (including pathways and boundary wall, etc.) or of any kind whatsoever must not exceed 25% of the total project area; of the rest, 25% should be used for soft/green landscaping and the remaining, preferably 50% must have a thick cover of trees of the native variety, a list of which is given by the State of U.P. [Annexure 4(b), paper book Vol. IV]. The plantation of trees should be especially dense towards the Okhla Bird Sanctuary on the western side of the project area. Any construction work should commence only on completion of the planting of the trees.

82. In order to ensure full compliance with the recommendations of the expert bodies (which form part of the judgment) and the directions of this Court, the construction of the project needs to be overseen by an expert committee. One member of the committee, preferably an ornithologist will be nominated by the MoEF, the other member will be nominated by the CEC in consultation with the amicus and the Chairman-cum-CEO of NOIDA will be the member-secretary of the committee. The committee should be constituted within two weeks from today.

83. It is made clear that the above directions are given in the peculiar facts of this case and nothing said in the judgment shall form precedent when the court is hearing the matter of the “buffer zones”.

84. Before putting down the records of the case a few observations may not be out of place. The EIA Notification dated 14-9-2006 urgently calls for a close second look by the authorities concerned. The projects/activities under Items 8(a) and 8(b) of the schedule to the notification need to be described with greater precision and clarity and the definition of built-up area with facilities open to the sky needs to be freed from its present ambiguity and vagueness. The question of application of the general condition to the projects/activities listed in the schedule also needs to be put beyond any debate or dispute. We would also like to point out that the environmental impact studies in this case were not conducted either by the MoEF or any organisation under it or even by any agencies appointed by it. All the three studies that were finally placed before the Expert Appraisal Committee and which this Court has also taken into consideration, were made at the behest of the project proponents and by agencies of their choice. This Court would have been more comfortable if the environment impact studies were made by the MoEF or by any organisation under it or at least by agencies appointed and recommended by it.

85. The IAs stand disposed of with the above observations and directions.

Appendix I (by SACON)

86. “7. Suggested proactive environmental measures

a Although there appears to be no perceptible impact, as a precautionary approach, we suggest following measures for the overall improvement of the OBS:

1. The periodical removal of water hyacinth should be ensured for better quality of water.

b 2. Artificial nest boxes should be placed along the western boundary of the sanctuary and adjoining parts to enhance breeding potential of birds.

3. Periodical monitoring of water quality parameters should be undertaken to enhance wetland dependent species and their population.

c 4. Regular monitoring of population of avifauna should be undertaken. On the terrestrial habitat also monitoring of small mammals may be carried out.

5. Extensive planting of native species suitable for urban habitat should be done more than 10 times in and around the project area. This will in turn help in sustainability of key bird species. It is noteworthy to mention that NOIDA Authority has already planted 1,70,000 saplings.

d 6. For the scientific management of the OBS, the prescriptions of the management plan under preparation by the Wildlife Institute of India, Dehradun should be followed with necessary financial support.

7. Inside the sanctuary, battery operated vehicles should be used for visitors.

e 8. For the effective protection and management of the OBS, the sanctuary should be suitably fenced.

9. In view of its unique location and interspersed ecological settings of various landscape elements, it is suggested that the proposed park may have an ecological interpretation centre.”

f ***Appendix II (by WII)***

87. “5. Suggested mitigation measures

To mitigate the loss of tree cover and the change in landscape structure due to the construction of the park and subsequent anticipated increase in disturbance due to the increased human activities adjacent to the OBS, following mitigation measures have been suggested:

g (1) *Revegetation of the project site to compensate the loss of vegetation.*—Ameliorative measures have already been taken up by NOIDA by planting both native and exotic species within the project area and on the eastern flank of left afflux bund of Yamuna river/OBS at close spacing. However, emphasis should be given to propagate only the native species.

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(2) *Reduction of adverse impact on the OBS.*—It is suggested that buffer at the north and north-eastern side of the sanctuary to reduce direct disturbance to the OBS may be created. The area north of the wire bund of the OBS is a promising site for water birds which prefer shallow water or grass growth particularly geese and waders. It is suggested that the waterlogged Yamuna floodplain north to the OBS and up to the DND flyover having an area of 130 ha (Fig.1) may be included with the OBS or protection to it as the buffer under the provision of WPA, 1972 be provided.

The strip of woodland with an area of 24 ha immediately to the north of the project area (Fig.1) needs to be protected as buffer of the OBS also and its land use needs to be maintained unaltered. Being in close proximity of the OBS it will have an ameliorative effect on the sanctuary. It would also provide additional habitat to the terrestrial bird species of the OBS.

Efforts should also be made to keep the intensity of artificial light and noise at the project site to a bare minimum during night, especially after sunset in migratory season of birds (October-March). Bird friendly diffused light with blue tinge during night, may reduce the negative impacts if any on OBS, though much research on this aspect is required.

It is suggested that at the periphery of the OBS, fence wherever not existing be created and the breach in the existing fence be mended on priority.

(3) *Eliciting support from the Government of Delhi for the conservation of OBS.*—As the OBS is a inter-State protected area having open access from all sides it is imperative that the Government of Delhi may also be persuaded to take active part in its management.

(4) *Ensuring financial commitment for the improved conservation management of the park.*—As per the order of the Honourable Supreme Court granted for other development project adjacent to protected area (e.g. IA No. 856 of 2006), 5% of the total cost of the project be deposited with the Forest Department, Government of U.P. to improve the ecosystem structure and functions, water bird habitat, public amenities and interpretation centre and improved management of the OBS.”

Appendix III (by EAC)

88. “During discussions following points emerged:

(i) NOIDA Authority, while making presentation, informed that the project involves the renovation, preservation and beautification of park on a total plot area of 33.43 ha. The total built-up area of the covered construction is 6999 sq m. Before the development of site there were 6803 trees of different species out of which 6241 trees were cut and 562

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trees were shifted to other parks. Further, they informed that the following components of the project have already been completed:

- | | | |
|----------|---------------------------------------|-----|
| <i>a</i> | (a) Boundary wall and gate | 90% |
| | (b) Construction of monument building | 60% |
| | (c) Landscaping and plantation | 80% |
| | (d) Pavements | 75% |

- b* The other infrastructural works proposed by the NOIDA Authority for environmental safeguards/measures and for effective EMP are use of treated waste water, solid waste management, energy saving, tree plantation and parking, etc. The other works which are important in the context of Okhla Bird Sanctuary are control of noise, glare and efficient traffic management.

- c* (ii) Possibility should be explored to increase the greenery and plant broad-leaf native trees along the pathways inside and outside the park. This will help in the reduction of surface runoff.

- d* (iii) The water quality and water balance are key elements and require detailed management and monitoring. No fresh water/groundwater should be used for gardening/horticulture purposes. The requirement of water should be met from self-recycling treated sewage without placing of strain on the supply system for the nearby residential and commercial areas.

- e* (iv) Treated waste water from Sector 54 sewerage treatment plant is proposed for horticulture purposes. It must also be utilised as much as possible for such purposes as toilet flushing and pavement/floor washing. The aforesaid purposes will need tertiary treatment of sewage.

- e* (v) No more than 20% of rain water shall be discharged out of the project site into the existing drain. The rain water harvesting system should be designed based on the soil characteristics and highest level of groundwater table.

- f* (vi) The species of trees inside the park and in buffer zone both on Okhla Bird Sanctuary side and road side should be of indigenous types that do not disturb the water balance of the area. The grass and artificial plantations which are not native should be avoided.

- g* (vii) Adequate noise barriers in the form of thick plantation of appropriate species of trees and bushes laid in a tiered form to create a green screen on either side of the bund road should be provided. A no horn zone should be declared and maintained around the Okhla Bird Sanctuary. The development of green belt and tree plantation shall be carried out in consultation with the Indian Council of Forest Research and Education, Dehradun.

- h* (viii) Solar energy should be utilised for illumination of common areas, lighting of gardens and paved footpaths, etc.

2015 SCC OnLine NGT 3

Before The National Green Tribunal Principal Bench New Delhi
(BEFORE SWATANTER KUMAR, CHAIRPERSON, M.S. NAMBIAR, J.M., DR. D.K. AGRAWAL, E.M.
AND PROF. A.R. YOUSUF, E.M.)

In The Matter of:

Vikrant Kumar Tongad, A-93, Sector - 36, Greater Noida-201308
Distt. Gautam Budh Nagar, Uttar Pradesh ... Applicant;

Versus

1. Delhi Tourism and Transportation Corporation, Through its Chairman 18-A, DDA SCO Complex Defence Colony New Delhi-110024
2. National Capital Territory of Delhi, Through The Chief Secretary Delhi Secretariat IP Estate New Delhi-110002
3. Union of India, Through its Secretary Ministry of Environment and Forest Paryavaran Bhawan CGO Complex, Lodhi Road, New Delhi-110003
4. Delhi Pollution Control Committee, Through its Member Secretary 4th Floor, ISBT Building, Kashmere Gate New Delhi-110006 ... Respondents.

Original Application No. 137 of 2014

Decided on February 12, 2015, [Hearing on: 19th January, 2015]

Counsel for Applicant:

Mr. Rahul Choudhary, Advocate for the Applicant

Counsel for Respondents:

Mr. S.D. Upadhyay, Senior Advocate along with Mr. H. Peechara, Advocate for Respondent No. 1

Mr. Balendu Shekhar, Advocate for Respondents No. 2 & 4

Mr. Vivek Chib, Advocate for Respondent No. 3

Mr. Avijit Bhushan, Advocate for UPSIDC

JUDGMENT

1. Whether the judgment is allowed to be published on the net?
2. Whether the judgment is allowed to be published in the NGT Reporter?

Justice Swatanter Kumar. (Chairperson)

Following precise question of law falls for consideration of the Tribunal in the present application:

Whether, constructing a 'bridge' across Yamuna is a 'project' or 'activity' that shall require prior Environmental Clearance from the Regulatory Authority, particularly with reference to Entry 8(a) and/or 8(b) of the Schedule to the Environment Clearance Regulations, 2006 (for short 'Regulations of 2006')?

2. The necessary facts giving rise to the present application are that, the applicant, who claims to be a public spirited person, working in the field of environmental conservation, particularly devoted to conservation of wetlands and ground water, has filed the present application, challenging construction of a 'Signature Bridge' across River Yamuna at Wazirabad, Delhi. The challenge is primarily on the ground that the said construction has commenced and is being carried on without obtaining prior Environmental Clearance from the Regulatory Authority in terms of the provisions of

the Regulations of 2006. Delhi Tourism and Transport Development Corporation (DTTDC) (Respondent No. 1) has commenced the project of construction of 'Signature Bridge' across River Yamuna at Wazirabad, Delhi, which is an un-symmetric cable-stayed bridge, with a main span of 251 meters and total length of 675 meters. The composite deck of the bridge carrying eight lanes (four on each side), is about 35 meters wide and is supported by lateral cables spaced at 13.5 meters intervals. The height of steel tower is approximately 150 meters. The total area of Signature Bridge Project is 1,55,260 sq. mtrs.

3. It is stated by the applicant that the Master Plan of NCT of Delhi, designates floodplains of River Yamuna in Zone 'O', expanding to an area of 9700 hectares or 97 sq. kms. The area bears special characteristics in terms of being an eco-sensitive area, consisting of natural features with large stretches of land between water course and existing bunds on the sides of River Yamuna. It is also averred that the whole expanse of these stretches are not to be used for development, therefore, need not be taken up under Section 8 (Zonal Development Plan) of Delhi Development Authority Act, 1957. As per the estimates, around 1600 hectares of land is under water (river extent) and 8100 hectares is dry land (flood plains). The reach from Wazirabad barrage to Okhla barrage is 4700 hectares. According to the applicant, the construction of the bridge is likely to impact River Yamuna and river hydrology adversely. The applicant relies upon a report prepared by Environics Trust, New Delhi and Peace Institute Charitable Trust, Delhi, on 'Impact Assessment of Bridges and Barrages on River Yamuna', which was published in the year 2009. The report intended to understand and assess the impacts due to rail/road bridges and barrages on the river's environment and hydrology on the whole. According to the applicant, considering this Report, it was necessary and prudent to conduct Environmental Impact Assessment of the Signature Bridge Project and its impacts on River Yamuna and its hydrology. As per the applicant, the impacts of the activities of the proposed bridge construction can occur during Planning and Designing Stage to Pre-construction Stage, Construction Stage and Operation Stage. The applicant has also stated certain impacts of such constructions, like, diversion of waterways, contamination of soil and impact on aquatic life, including the chances of ground water contamination, which may occur at the Pre-Construction and Construction stage. For these reasons, the applicant claims that it was necessary for the Project Proponent to obtain prior Environmental Clearance before starting the project in terms of the Regulations of 2006.

4. It is the specific case of the applicant, that, such projects are covered under the Regulations of 2006 and particularly under Entry 8(a) and 8(b) of the Schedule to the said Regulations.

5. In reply to these, Respondent No. 1 admits that it has commenced construction of the Signature Bridge over River Yamuna without obtaining any Environmental Clearance from the Regulatory Authority i.e. Ministry of Environment, Forest & Climate Change (for short 'MoEF')/State Level Environment Impact Assessment Authority (for short 'SEIAA'). According to the Respondent No. 1, since the existing two lanes Bridge at Wazirabad was unable to bear increased volume of road traffic, the Government of NCT of Delhi decided to construct a new eight lane bridge for high moving traffic. Thus, the construction work of the bridge was assigned to Respondent No. 1 by Government of NCT of Delhi in terms of MoU dated 27th August, 2004. A traffic study report was conducted by M/s Stup Consultants Pvt. Ltd. on behalf of Respondent No. 1, which recommended that considering the present traffic volume and the future traffic growth, a new link is badly required, as the existing infrastructure was insufficient in all respects. An Environmental Impact Assessment (for short, 'EIA') study was also conducted which summarized that there is likely to be no significant impact on the environment due to the proposed construction of the bridge. According to Respondent No. 1. Delhi Metro Rail Corporation gave 'No Objection' as per letter

dated 1st December, 2004, similarly, the Ministry of Defense gave 'No Objection' on 23rd May, 2006, the Technical Committee of the Delhi Development Authority gave 'No Objection' on 14th June, 2006 and the Archeological Survey of India gave 'No Objection' on 7th August, 2006. The Yamuna Standing Committee considered the case in its 72nd meeting held on 7th January, 2007 and desired that the afflux of 18.20 cm should be further reduced by providing an additional water way beneath the approach road on the left bank of the river. Additional studies were carried out to reduce the afflux level as desired, to a level so as not to inhibit drainage of the city by providing additional openings.

6. When Respondent No. 1 applied to the MoEF for seeking Environmental Clearance for execution of the project, the MoEF, vide its letter dated 14th March, 2007 informed Respondent No. 1 that 'Bridges' are not covered under the Regulations of 2006 and as such Environmental Clearance is not required. The letter dated 14th March, 2007 reads as under:

"Subject: Regarding Environmental Clearance for Construction of bridge on River Yamuna at Wazirabad Delhi: Your application dated 6.11.2006 This has reference to your application dated 6.11.2006 for Environmental Clearance for construction of proposed bridge on River Yamuna at Wazirabad, Delhi under New EIA Notification 2006.

I am directed to inform you that 'Bridges' are not covered under EIA Notification 2006 and as such Environmental Clearance is not required."

7. In furtherance to the above, Respondent No. 1 did not pursue the matter any further and commenced the construction work which is even being carried on presently. It is also averred by this Respondent that the Central Water and Power Research Station (for short 'CWPRS'), Pune carried out further Hydraulic Studies and recommended the construction with certain technical parameters, which were duly adopted by Respondent No. 1 in order to take all precautionary measures in the interest of environment.

8. The NCT of Delhi and Delhi Pollution Control Committee (for short 'DPCC'), i.e., Respondent Nos. 2 & 4 respectively, have taken a stand that they are unable to say as to what is the proposed use of construction of this project in future. However, they also stated that "Bridge" is not covered under the Regulations of 2006. In their reply, they referred to Entry No. 7(f) i.e., 'Highways' - (both National Highways or State Highways) but have not made any specific averment as to whether the present project is covered under Entry 7(f) or not. MoEF, though, did not file any separate reply, but, they have taken a stand during the course of the arguments that, "Bridges" is an 'activity' or 'project' which is not covered under any of the Entries of the Schedule to the Regulations of 2006, and hence, does not require Environmental Clearance.

9. As is evident from the above narrated factual matrix of the case, the entire controversy revolves around the meaning and interpretation of Entries 8(a) and (b) and/or 7(f) respectively of the Schedule to the Regulations of 2006. Thus, it would be necessary for us to notice the Entries at this stage itself. The said Entries of the Schedule reads as under:

Project or Activity		Category with threshold limit		Conditions if any
		A	B	
(1)	(2)	(3)	(4)	(5)
7		Physical Infrastructure including Environmental Services		
7 (f)	Highways	[(i) New National Highways; and ii) Expansion of	[(i) All new New State Highway Projects]	[General Condition shall apply. Note-Highways

		National Highways greater than 30 km involving additional right of way greater than 20 in involving land acquisition.]	(ii) State Highway expansion projects in hilly terrain (above 1000 m AMSL) and or ecologically sensitive areas].	include expressways.]
8		Building / Construction projects / Area Development projects and Townships		
8 (a)	Building and Construction projects		≥ 20000 sq.mtrs and < 1,50,000 sq.mtrs. of built-up area#	[The built-up area for the purpose of this notification is defined as “the built-up or covered area on all the floors put together including basement(s) and other service areas, which are proposed in the building/construction projects]
8 (b)	Townships and Area Development projects.		Covering an area ≥ 50 ha and or built up area ≥ 1,50,000 sq. mtrs ++	++All projects under Item 8(b) shall be appraised as Category B1

10. The present project, as per the affidavit filed by Respondent No. 1 relates to construction of an eight-lane wide bridge across River Yamuna, connecting Eastern and Western parts of Delhi. This was necessitated for the purpose of easing out the traffic congestion. The old bridge over River Yamuna at Wazirabad was to be retained for movement of slow traffic. This was primarily to feed fast developing areas of Yamuna Vihar, Gokul Puri, Nand Nagri and Inter-State Traffic from Ghaziabad, Sahibabad, Loni on Eastern side and Timarpur, Azadpur, Burari, Mukherjee Nagar, Mall Road etc. on the Western side. Development of this ‘Signature Bridge’ was imperative and in the interest of general public, in order to ease the traffic and meet the needs of the residents across.

11. First and foremost, the meaning and scope of the word ‘bridge’ has to be understood.

A bridge’ is a building erected across a river, ridge, valley, or other place for common benefit of travellers. It is a structure that spans and provides a passage over a road, railway, river or some other obstacle (Ref: *Wharton’s Law Lexicon* 15th Edn., 2012, *Collins English Dictionary and Thesaurus* 1st Edn., 1999).

Law Lexicon, 3rd Edition 2012 describes the word ‘bridge’ as follows:—

“A bridge is a structure of wood, iron, brick, or stone, ordinarily erected over a river, creek, pond or lake; or over a ravine, railroad, canal, or other obstruction in a highway, so as to make a continuous roadway, and afford to travelers a convenient passageway from one bank to the other. While a bridge is a part of the highway which passes over it, no definite rule can be laid down as to where one terminates and the other begins.”

12. Besides the above specific meaning that has been given to the expression 'bridge', even in common parlance, it is understood to be a structure that connects any two ends, for various activities like travelling, crossing a river, joining National or State Highways or roads and is intended to provide for natural or artificial link for commutation. A bridge can hardly be termed as a stand-alone project as it would normally be part of a major or a smaller development or allied activity. A bridge therefore, cannot be taken as an abstract term. It would, without exception, always be a part of a project, i.e., construction of a highway or even an ordinary road and/or to cross a river, canal, drain or even a rail road. To put it simply, the bridge would be a segment or part of a bigger project, activity or development. It can hardly be a final product in itself. Like even in the present case, it is meant to connect the Wazirabad Barrage and Okhla Barrage, to ease out traffic pressure and provide fast movement of traffic across River Yamuna, though the existing bridge would still be in existence. Thus, it would be a step in the final process and will not be equitable to a final product. A bridge cannot be made to stand on its own without connecting it with the roads on both ends. It is an integral part of an activity of development or area development that has to be seen wholly and from a holistic point of view.

13. Regulations of 2006 have been issued by the Central Government in exercise of its statutory powers conferred under sub-section (1) and clause (v) of sub Section (2) of Section 3 of the Environmental Protection Act, 1986 (for short 'Act of 1986') read with clause (d) of sub-rule 3 of Rule 5 of the Environmental (Protection) Rules, 1986 (for short 'Rules of 1986') in supersession of the previously issued notifications. This notification not only has the force of law, but is a paramount piece of legislation for controlling and preventing environmental pollution and degradation.

14. Clause 2 of Regulations of 2006 declares and prescribes that a 'project' or 'activity' shall require prior Environmental Clearance from the concerned Regulatory Authority under Category 'A' and 'B' as the case may be. This would equally apply to all new projects or activities, as well as expansion and modernization of existing projects or activities. Clause 2 also has an inbuilt restriction or limitation. It makes it obligatory upon the project proponent of any 'project' or 'activity' to take such Environmental Clearance before any construction work or preparation of land by the project management (except for securing the land), has started on the 'project' or 'activity'. In other words, obtaining of prior Environmental Clearance is a condition precedent before taking any steps in relation to the project or activity in terms of Clause 2. Schedule to the Regulations of 2006, then elaborates the projects and activities which would be covered under the said Clause 2. The heading of the Schedule also states 'List of Projects or Activities Requiring Prior Environmental Clearance'.

15. The significant expressions used by the framers in Clause 2 are 'projects and activities'. Obviously, when these two expressions have been used, they are neither interchangeable nor can be treated as synonymous. They have to have a distinct and different meaning with reference to the circumstances of a given project or activity. 'Project' even in common parlance is understood to mean, aim a planned undertaking; an individual or collaborative enterprise that is carefully planned to achieve a particular aim; a proposed or planned undertaking; any work taken up under a scheme for the purpose of providing employment etc. (Ref: *The Law Lexicon* 3rd Edn., 2012, *Oxford Dictionary of English* 3rd Edn. 2010, *Wharton's Law Lexicon* 15th Edn., 2012). The word 'Activity' could mean the combination of operations undertaken by the corporate body, whether or not they amount to a business, trade or profession in the ordinary sense. It could also mean the collective acts of one person or two or more people engaged in a common enterprise. It could even mean a condition in which things are happening or being done; busy or vigorous action or movement; a thing that a person or group does or has done (Ref: *The Law Lexicon* 3rd Edn., 2012, *Black's Law Dictionary* 9th Edn.,

2009, *Oxford Dictionary of English* 3rd Edn., 2010). 'Project' is a term of wider connotation than an 'activity'. Normally every 'activity' would be part of a 'project' but not always. Both these expressions cannot be defined or explained in rigid and inelastic terms. But, the fact of the matter is that these expressions have to be given a wider meaning and a liberal construction with reference to the facts of a given case, involving a 'project' or an 'activity'.

16. Entry 7(f) of the Schedule to the Regulations of 2006 deals with projects and activities of 'Highways'. It includes New National Highways, all new State Highway Projects and expansion thereof. Subject to the qualifications stated in that Entry, the Highways would include 'Expressways'.

17. Entry 8(a) relates to Building and Construction projects of $\geq 20,000$ sq. mtrs. and $< 1,50,000$ sq. mtrs. of built up area. Entry 8(b) relates to projects of Township and Area Development, covering an area which is ≥ 50 hectares and/or built up area which is $\geq 1,50,000$ sq. mtrs. Such projects or activities under Entries 8(a) and 8(b) would be required to take Environmental Clearance and all such projects of Township and Area Development under Entry 8(b) satisfying the threshold area would be treated and appraised as category 'B1' Projects. Entries 8(a) and 8(b) are under Entry 8 which carries a heading 'Building/Construction projects/Area Development projects and Townships'. The legislature has worded heading of Entry 8 in very wide and expressive terms. Use of expression with such wide magnitude clearly indicates the legislative intent that they should be construed liberally. These expressions in fact, and as above referred, are incapable of being construed strictly. Entry 8(b) talks both of Township and Area Development projects. These expressions relate to same or identical 'project' or 'activity'. Besides developing township, development of the areas is also contemplated as an activity for a bigger project. If these projects of Township and Area Development are covering an area ≥ 50 hectares and/or the built up area in excess of 1,50,000 sq. mtrs., the project/activity would require prior Environmental Clearance.

18. Having deliberated upon the relevant provisions of the Regulations of 2006, now we would deal with the principles applicable to interpretations of such Entries. The Hon'ble Supreme Court in its various judgments has stressed upon the liberal interpretation of a statute, if it is a social welfare legislation. For instance, in the case of *The Authorised Officer, Thanjavur v. S. Naganatha Ayyar*, (1979) 3 SCC 466, the Court held that:

"1. While dealing with welfare legislation of so fundamental a character as agrarian reform, the court must constantly remember that the statutory pilgrimage to 'destination social justice' should be helped, and not hampered, by judicial interpretation."

In the case of *Workmen of American Express International Banking Corporation v. Management of American Express International Banking Corporation*, (1985) 4 SCC 71, the Court held that:

"4. The principles of statutory construction are well settled. Words occurring in statutes of liberal import such as social welfare legislation and 'Human Rights' legislation are not to be put in procrustean beds or shrunk to Liliputian dimensions. In construing these legislations the imposture of literal construction must be avoided and the prodigality of its mis-application must be recognised and reduced. Judges ought to be more concerned with the 'colour', the 'content' and the 'context' of such statutes."

In the case of *Securities and Exchange Board of India v. Ajay Agarwal*, (2010) 3 SCC 765, the Court held that:

"41. It is a well known canon of construction that when Court is called upon to interpret provisions of a social welfare legislation the paramount duty of the Court is

to adopt such an interpretation as to further the purposes of law and if possible eschew the one which frustrates it.”

19. The Courts have also evoked the principle of purposive construction in relation to social welfare legislations. The statute and its provisions have to be given an expanded meaning that would tilt in favour of the object of the Act, curing or suppressing the evil by enforcing the law. While interpreting an Entry in a Schedule to an Act, the ordinary rule of construction requires to be applied to understand the Entries. There is a functional difference between a body of the statute on the one hand and the Schedule which is attached thereto on the other hand. The Sections in these Acts are enacting provisions. In contrast, the Schedule in an Act sets down things and objects and contains their names and descriptions. The sections of and the Schedule to the Act, have to be co-jointly read and construed, keeping in view the purpose and object of the Act while keeping a clear distinction between a fiscal and a social welfare legislation in mind. Social welfare programmes projected by the State and object of the statute are of paramount consideration while interpreting and construing such Entries. The law is always intended to serve the larger public purpose. In fact, welfare of the people is the supreme law and an enacted law should be administered lawfully, i.e., *salus populi est suprema lex*. It is not possible even for the legislature to comprehend and provide solution to all the evils or obstacles that are likely to arise in implementation of the enacted laws. Therefore, the Tribunal must adopt an approach for interpretation of these Entries which would further the cause of the Act and the intent of the legislation and be not unduly influenced by the rule of restricted interpretation.

20. In the case of *Regional Provident Fund Commissioner v. Shibu Metal Works*, AIR 1965 SC 1076, the Hon'ble Supreme Court was concerned with the question as to the true content of the entry “Electrical, Mechanical or general engineering products” included in Schedule 1 of the Employees' Provident Fund Act, 1952. The Hon'ble Supreme Court while dealing with this question and the principles that should be applied to find the true content of such entry held as under:

“13. Reverting then to the question of construing the relevant entry in Sch. I, it is necessary to bear in mind that this entry occurs in the Act which is intended to serve a beneficent purpose. The object which the Act purports to achieve is to require that appropriate provision should be made for the employees employed in the establishments to which the Act applies; and that means that in construing the material provisions of such an Act, if two views are reasonably possible, the courts should prefer the view which helps the achievement of the object. If the words used in the entry are capable of a narrow or broad construction, each construction being reasonably possible, and it appears that the broad construction would help the furtherance of the object, then it would be necessary to prefer the said construction. This rule postulates that there is a competition between the two constructions, each one of which is reasonably possible. This rule does not justify the straining of the words or putting an unnatural or unreasonable meaning on them just for the purpose of introducing a broader construction.”

21. The Hon'ble Supreme Court while giving a wider meaning to the Entry, held that the manufacture of brass utensils can easily be regarded as an activity, the object of which is the manufacture of general engineering products. This was the balanced and proper interpretation which was neither narrow nor broad, but was one that fitted into the scheme of the Schedule and the Object of the Employees' Provident Fund Act, 1952.

22. As we have already noticed that the Regulations of 2006 have been enacted in furtherance to the powers of delegated legislation vested in the Central Government in terms of the provisions of the Act and Rules of 1986. The Act of 1986 was enacted

while noticing the decline in environmental quality as evidenced by increasing pollution, loss of vegetal cover and biological diversity, excessive concentrations of harmful chemicals in the ambient atmosphere and in food chains, growing risks of environmental accidents and threats to life support systems. It also noticed the inadequate linkages in handling matters of industrial and environmental safety. The purpose was to provide for greater environmental safety. The Act of 1986 was intended to take appropriate steps for the protection and improvement of environment. Environment not only includes water, air and land, but, also the interrelationship which exists among and between water, air and land and human beings, other living creatures, plants, micro-organisms and property. Section 3 of the Act of 1986 *inter alia*, but, specifically empowers the Central Government to take all such measures as it deems necessary for the purpose of protecting and improving the quality of environment. Clause (ii) and (iii) of Sub-Section 2 of Section 3, requires the Central Government to *inter alia*, but, specifically take measures as contemplated under sub-section 1 of Section 3, in relation to planning and execution of a nation-wide programme for prevention, control and abatement of environmental pollution, as well as for laying down standards for the quality of environment in its various aspects. Rule 5 of the Rules of 1986 further empowers the Central Government to place prohibition and restriction on the location of industries and the carrying on of processes and operations in different areas with reference to the environmental pollution. The object and purpose of the Act is to ensure prevention and control of environmental pollution, its abatement and particularly, degradation thereof.

23. Rivers are a very significant aspect of environment and ecology. The authorities concerned are not only expected to take steps for preventing pollution of water *per se* but, are also required to ensure that its biodiversity, ecology and floodplain is not unduly intruded or exploited to the disadvantage of the environment. That is the precise reason that the Act of 1986 not only refers to the pollution of air, water and land but even admits to protect its interrelationship with human beings and even other living creatures including plants etc. The legislature has left nothing to the imagination and has worded the Entry 8(b) very widely so as to cover within its ambit every facet of environment as contemplated under Section 2(a) of the Act of 1986. The aim and object of the Act of 1986 is to protect the environment, which certainly includes rivers.

24. Rivers can be polluted directly or its ecology, biodiversity or flow can be adversely affected by developmental activities, thus, causing environmental hazards. Structures like bridges can cause a series of impacts both in immediate time and extended over a long duration. Impact is not only limited to the specific physical development, but, it also gives rise to several other interlinked elements which can cumulatively impact the environment which replenishes the resources in long run. These environmental hazards may result from flooding, narrowing of embankments and endangering of aquatic life. Any development project or activity upon the floodplain, river bank or across the river is bound to have some impact upon the ecology and biodiversity of the river. It is an established fact that such projects, whether part of a comprehensive developmental activity or independently, would narrow the water course or environmental flow of the river. Such activity may have adverse impacts on aquatic flora and fauna. In some cases, it may adversely affect the floodplain and may amount to affecting the terrestrial ecology.

25. Thus, the assessment of such impact and degradation of environment resulting therefrom, is essential and is a matter which is of concern for the Expert Bodies appointed under the Act. Furthermore, Environmental Impact Assessment Guidance Manual for Building, Construction, Township and Area Development Project, 2010 provides that environmental facets which are to be considered in relation to township and area development are land, air, noise, water, biological, socio-economic and solid

waste management. Thus, it is necessary to ascertain the baseline data of these environmental facets before a project or an activity may be permitted or carried out.

26. The Regulations of 2006 have been promulgated with the aim and object of assessing the impact that a project or an activity would have upon the environment and ecology. The expert body is expected to precisely visualise the extent of environmental degradation resulting from the project before granting approval. Normally, the projects having irretrievable and permanent impacts on nature are not permitted, and where permitted, very stringent, protective and precautionary conditions are imposed. Thus, it is relevant at this stage to understand the concept of EIA as contemplated under the Regulations of 2006 with reference to the provisions of the Act of 1986 for protection of ecology and biodiversity of the river and riverbed.

27. In order to understand the concept of EIA, one first needs to know what an 'Environmental Impact' is. An 'Environmental Impact' is any impact or effect (positive or negative) that an activity has on an environmental system, environmental quality or natural resources. It is also known as an environmental effect [*Oxford Dictionary of Environment and Conservation*, First Edn., 2007]. An 'Environmental Effect' is defined as a natural or artificial disturbance of the physical, chemical or biological components that make up environment [*Black's Law Dictionary*, 9th Edn., 2009]. Such activities may take the form of mining, oil and gas exploration, thermal, nuclear and hydraulic power plants, metallurgical industries, chemical fertilizers, storing of hazardous chemicals, industrial estates/parks/complexes/areas, waste treatment plants, etc.

28. EIA was first introduced in the USA in 1969 and has since been widely accepted. It is being adopted in one form or the other in an increasing number of countries as a basis for making informed and rational judgments about what sort of developments are environmentally acceptable. It even includes the concept of 'Strategic Environmental Assessment'. An EIA is defined as a formal statement of the environmental impacts that are likely to arise from major activities such as new legislation or a new policy, programme or project. The results of the assessment are reported in the 'Environment Impact Statement' (EIS) [*Oxford Dictionary of Environment and Conservation*, First Edn., 2007]. Thus, an EIA in general parlance does not confine itself only to projects but also to legislations and policies.

29. With expansion and modernization of economic and trade activities in India, there was a need felt to understand as well as regulate the potential environmental impacts that such activities may have. Thus, in order to impose certain restrictions and prohibitions on new projects or activities, or on expansion or modernization of existing projects or activities, the Central Government enacted the Environment Clearance Regulations, 2006, on 14th September, 2006 under Section 3(1) and 3(2)(v) of the Act of 1986 and Rule 5(2) of Rules of 1986. The objective of the Regulations of 2006 is to set procedures of environmental clearance before establishment of project of identified nature and size. It required the construction of new projects or activities or the expansion or modernization of existing projects or activities listed in the Schedule to the notification to be undertaken in any part in India only after prior Environmental Clearance is granted by the particular authority. These Regulations do not define an EIA or an EIS. However, it requires the Expert Appraisal Committees in case of category 'A' projects and the State Level Expert Appraisal Committees in case of category 'B-1' projects or activities, including applications for expansion and modernization and/or change in product mix of existing projects or activities, to determine detailed and comprehensive ToR addressing all relevant environmental concerns for the preparation of an EIA. Categorization of projects/activities into category 'A' or 'B' is done on the basis of the potential hazards that it poses to the environment, location, the extent of area involved etc.

30. Thus, clearly, the mandate of the Regulations of 2006 is to ensure protection of

environment and ecology in face of rapid developmental activities, which are even the need of the hour. Since the object of the Regulations of 2006 is to provide developmental activities while ensuring presence of a safer environment, it can be termed as welfare legislation. Thus, the rule of reasonable constructions in conjunction with the liberal construction would have to be applied.

Article 48A in Part-IV (Directive Principles) of the Indian Constitution enjoins that "State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country". Article 47 further imposes a duty on the State to improve public health as its primary duty. Article 51A(g) imposes "a fundamental duty" on every citizen of India to protect and improve the natural "environment" which includes forests, lakes, rivers and wild life, and to have compassion for living creatures. The word "environment" is of broad spectrum which brings within its ambit "hygienic atmosphere and ecological balance". It is, therefore, not only the duty of the State, but also the duty of every citizen to maintain hygienic environment. The State, in particular, has a duty in that behalf to shed its extravagant, unbridled sovereign power and to forge in its policy, to maintain ecological balance and hygienic environment. Article 21 protects 'Right to Life' as a fundamental right. Enjoyment of life and its attainment, including the right to live with human dignity, encompasses within its ambit, the protection and preservation of environment, ecological balance, free from pollution of air and water, sanitation, without which life cannot be enjoyed. Any contra acts or actions would cause environmental pollution. Therefore, there is a constitutional imperative on the State authorities and bodies like the Pollution Control Board not only to ensure and safeguard proper environment, but also to take adequate measures to promote, protect and improve the environment, both, man-made and natural. Sections 3 and 5 of the Act of 1986, apart from other provisions of Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, empower the Government to make all such directions and take all such measures as are necessary or expedient for protecting and promoting the 'Environment', which expression has been defined in very wide and expansive terms in Section 2(a) of the Act of 1986. [*Noyyal River Ayacutdars Protection Association rep. by its President, P.M. Govindaswamy Pappavalasu v. The Government of Tamil Nadu rep. by its Secretary, Public Works Department*, 2007-1-LW 275, *Indian Council for Enviro-Legal Action etc. v. Union of India*, (1996) 3 SCC 212].

The flood plains and river bed of Yamuna are under increasing pressure of alternative land use for various purposes, which are driven primarily by growth of economy at the cost of the river's integrity as an eco-system. [*Manoj Mishra v. Union of India*, Original Application No. 6 of 2012 and Original Application No. 300 of 2013, decided on 13th January, 2015]. The powers conferred on the Central Government by virtue of provisions contained in Section 3, 5 and 25 of the Act of 1986 and on the National Green Tribunal by virtue of Sections 14, 15 and 16 read with Section 18 of the National Green Tribunal Act, 2010, are wide enough to provide for protection, preservation and restitution of the environment and ecology of the river bed of River Yamuna.

31. If an activity is allowed to go ahead, there may be irreparable damage to the environment and if it is stopped, there may be irreparable damage to economic interest. In case of doubt, however, protection of environment would have precedence over the economic interest. Precautionary principle requires anticipatory action to be taken to prevent harm. The harm can be prevented even on a reasonable suspicion. It is not always necessary that there should be direct evidence of harm to the environment [*Vellore Citizens Welfare Forum v. Union of India*, (1996) 5 SCC 647].

32. The applicability of 'Principle of Liberal Construction' to socio-welfare legislation like the Act of 1986, thus, could be justified either with reference to the 'doctrine of reasonable construction' and/or even on 'constructive intuition'. In the case of *Haat*

Supreme Wastech Pvt Ltd. v. State of Haryana, 2013 ALL (I) NGT REPORTER (2) (DELHI) 140, the Tribunal, while dealing with interpretation of the Regulations of 2006 along with the Schedule and while deciding whether the bio-medical waste disposal plants required Environmental Clearance or not, answered the question in affirmative, that, such plants are covered under Entry 7(d) and while answering so, applied the doctrine of 'reasonable construction' as well as 'constructive intuition'. Doctrine of 'reasonable construction' is intended to provide a balance between development and the environment. The Tribunal held that there was no occasion for the Tribunal to take the scope of Entry 7(d) as unduly restrictive or limited and it gave the entry a wide meaning. It was also held that the Environmental Clearance would help in ensuring a critical analysis of the suitability of the location of the bio-medical waste disposal plant and its surroundings and a more stringent observation of parameters and standards by the project proponent on the one hand and limiting its impact on public health on the other.

33. 'Development' with all its grammatical variations, means the carrying out of building, engineering, mining or other operations in, on, over or under land or the making of any material change in any building or land and includes re-development. It could also be an activity, action, or alteration that changes underdeveloped property into developed property (Ref: *Wharton's Law Lexicon*, 15th Edn., 2012, *Black's Law Dictionary* 9th Edn., 2009). Reading of Clause 2 of the Regulations of 2006 and the Schedule attached thereto, particularly in light of the above principles, clearly demonstrates that an expression of very wide magnitude has been deliberately used by the framers. They are intended to cover all projects and activities, in so far as they squarely fall within the ambit and scope of the Clause. There does not appear to be any interest for the Tribunal to give it a narrower or a restricted meaning or interpretation. In the case of *Kehar Singh v. State of Haryana*, 2013 ALL (I) NGT REPORTER (2) (DELHI) 140, the Tribunal had specifically held that there should exist a nexus between the act complained of and environment and that there could be departure from the rule of literal construction, so as to avoid the statute becoming meaningless or futile. In case of a social or beneficial legislation, the Tribunal should adopt a liberal or purposive construction as opposed to the rule of literal construction. The words used therein are required to be given a liberal and expanded meaning. The object and purpose of the Act of 1986 and the Schedule of Regulations of 2006 thereto was held to be of utmost relevance. In the case of present kind, if no checks and balances are provided and expert minds does not examine and assess the impacts of such projects or activities relating to development, consequences can be very devastating, particularly environmentally. Normally, the damage done to environment and ecology is very difficult to be redeemed or remedied. Thus, a safer approach has to be adopted to subject such projects to examination by Expert Bodies, by giving wider meaning to the expressions used, rather than to frustrate the object and purpose of the Regulations of 2006, causing irretrievable ecological and environmental damage.

34. There can hardly be any escape from the fact that Entries 8(a) and 8(b) are worded somewhat ambiguously. They lack certainty and definiteness. This was also noticed by the Hon'ble Supreme Court in the case of *In Re: Construction of Park at Noida Near Okhla Bird Sanctuary v. Union of India (UOI)*, (2011) 1 SCC 744, where the Court felt the need that the Entries could be described with greater precision and clarity and the definition of 'built-up area' with facilities open to the sky needs to be freed from its present ambiguity and vagueness. Despite the above judgment of the Hon'ble Supreme Court, Entry 8(a) and 8(b) were neither amended nor altered to provide clarity or certainty. However, the expression 'built up area' under the head 'conditions if any' in column (5) of the Schedule to the Regulations of 2006, was amended vide Notification dated 4th April, 2011. *Dehors* the ambiguities in these

Entries, an interpretation that would frustrate the object and implementation of the relevant laws, would not be permissible. 'Township and Area Development project' is an expression which would take within its ambit the projects which may be specific in relation to an activity or may be, they are general Area Development projects, which would include construction and allied activities. 'Area Development' project is distinct from 'Building and Construction' project, which by its very language, is specific and distinct. Entries 8(a) and 8(b) of the Schedule to the Regulations of 2006 have been a matter of adjudication and interpretation before the Hon'ble Supreme Court in the case of *In Re: Construction of Park at Noida Near Okhla Bird Sanctuary v. Union of India (UOI)*, (supra). In that case, Hon'ble Supreme Court was concerned with the construction of a park in Noida near the Okhla Bird Sanctuary. The Hon'ble Supreme Court provided a distinction between a 'Township project' and 'Building and Construction project' and held that a 'Township project' was different, both quantitatively and qualitatively from a mere 'Building and Construction project'. Further, that an Area Development project may be connected with the Township Development project and may be its first stage when grounds are cleared, roads and pathways are laid out and provisions are made for drainage, sewage, electricity and telephone lines and the whole range of other *civic infrastructure*, or an area development project may be completely independent of any township development project as in the case of creating an artificial lake, or an urban forest or setting up a zoological or botanical park or a recreational, amusement or a theme park. The Hon'ble Supreme Court principally held that a zoological or botanical park or a recreational park etc. would fall within the category of Entry 8(b) but, if it does not specify the threshold marker of minimum area, then it may have to be excluded from operation of the mandatory condition of seeking prior Environmental Clearance. The Court held as under:

"66. The illustration given by Mr. Bhushan may be correct to an extent. Constructions with built up area in excess of 1, 50,000 sq mtrs. would be huge by any standard and in that case the project by virtue of sheer magnitude would qualify as township development project. *To that limited extent* there may be a quantitative correlation between items 8(a) and 8(b). But it must be realized *that the converse of the illustration given by Mr. Bhushan may not be true*. For example, a project which is by its nature and character an "Area Development project" would not become a "Building and Construction project" simply because it falls short of the threshold mark under item 8(b) but comes within the area specified in item 8 (a). The essential difference between items 8(a) and 8(b) lies not only in the different magnitudes but in the difference in the nature and character of the projects enumerated there under.

67. In light of the above discussion it is difficult to see the project in question as a "Building and Construction project". Applying the test of 'Dominant Purpose or Dominant Nature' of the project or the "Common Parlance" test, *i.e. how a common person using it and enjoying its facilities would view it, the project can only be categorized under item 8(b) of the schedule as a Township and Area Development project*". But under that category it does not come up to the threshold marker inasmuch as the total area of the project (33.43 hectares) is less than 50 hectares and its built-up area even if the hard landscaped area and the covered areas are put together comes to 1,05,544.49 square metres, *i.e.*, much below the threshold marker of 1,50,000 square metres."

35. Besides dealing with the scope and dimensions of Entries 8(a) and 8(b) of the Schedule afore-stated, the Hon'ble Supreme Court, while referring to the findings given by the CEC in its report, that the Project was located at a distance of 50 mtrs. from the Okhla Bird Sanctuary and that in all probability, the project site would have fallen in the Eco-Sensitive Zone had a timely decision in this regard being taken by

the State Government/MoEF, permitted continuation of the project, and held as under:

“74. The report of the CEC succinctly sums up the situation. Though everyone, excepting the project proponents, views the construction of the project practically adjoining the bird sanctuary as a potential hazard to the sensitive and fragile ecological balance of the Sanctuary there is no law to stop it. This unhappy and anomalous situation has arisen simply because despite directions by this Court the authorities in the Central and the State Governments have so far not been able to evolve a principle to notify the buffer zones around Sanctuaries and National Parks to protect the sensitive and delicate ecological balance required for the sanctuaries. But the absence of a statute will not preclude this Court from examining the project's effects on the environment with particular reference to the Okhla Bird Sanctuary. For, in the jurisprudence developed by this Court Environment is not merely a statutory issue. Environment is one of the facets of the right to life guaranteed under Article 21 of the Constitution”

36. The above dictum of the Supreme Court clearly laid down a fine distinction between Entries 8(a) and 8(b) of the Schedule to the Regulations of 2006 on one hand, while on the other hand held that mere absence of law cannot be a ground for degrading the environment, as environment is one of the facets of 'Right to Life' as envisaged under Article 21 of the Constitution of India.

37. Thus, this Tribunal has to examine the ambit and scope of Entry 8(b) while keeping in mind the Scheme and Object of the Act of 1986, the Rules of 1986, the Regulations of 2006 along with its Schedule and most importantly right to clean environment as an integral concept of our Constitutional Scheme. The project in question is construction of a 'Signature Bridge' over River Yamuna, connecting eastern and western ends of the city of Delhi and to ensure fast and smooth flow of traffic in that part of the city. This certainly is an Area Development project falling within Entry 8(b) of Schedule to the Regulations of 2006. There is also no dispute that the total constructed area of the 'Signature Project' is 1,55,260 sq. mtrs., which is higher than the threshold marker of 1,50,000 sq. mtrs. This project cannot fall within Entry 7(f) of the Schedule to the Regulations of 2006, as it is neither a national nor a city highway and not even any part thereof.

38. Having held that the project in question is covered under Entry 8(b) of the Schedule to the Regulations of 2006, now we have to consider what relief can be granted to the applicant in the facts and circumstances of the case. Admittedly, particularly according to the Project Proponent, various other departments have granted them clearances and/or have already issued No Objection Certificates for construction of the said project. MoEF vide its letter dated 14th March, 2007 had informed the Project Proponent that 'bridges' are not covered under the Regulations of 2006 and as such, no prior Environment Clearance was required for commencement of the project. It is in the backdrop of these circumstances that the construction of the project commenced in the year 2007. As of today, more than 80 per cent of the bridge has already been completed. Huge public funds have been spent on this project. It is intended to serve public purpose and is in public interest, namely free and fast flow of traffic between east and west Delhi. Apparently, we cannot attribute any fault or breach of legal duty to the Project Proponent (Respondent No. 1). We do not think it is a case where we should either direct stoppage of project work or direct demolition thereof.

39. In light of the peculiar facts and circumstances of the case and the reasons afore-recorded, we dispose of this application with the following directions:

1. We hold that construction of a 'bridge' or similar activity covering a build up area $\geq 1,50,000$ sq. mtrs. and/or covering an area of ≥ 50 hectares, would be covered under Entry 8(b) of the Schedule to the Regulations of 2006.

2. We direct Respondent No. 1 to obtain Environmental Clearance for the project in question. Such application would be submitted within a period of three weeks from the pronouncement of this Judgment.
 3. The SEIAA shall consider the said application as Category 'B' project and would dispose it of by passing appropriate orders in accordance with law upon submission of Environmental Impact Assessment Report and in any case not later than six months from today.
 4. Though the major part of the project has already been completed, we do not direct demolition thereof in public interest. However, we direct SEIAA to put such terms and conditions as may be necessary to ensure that there are no adverse impacts on environment, ecology, biodiversity and environmental flow of River Yamuna and its floodplain.
 5. We also direct that the SEIAA may impose conditions containing remedial measures to be taken by the Project Proponent to ensure that there is no environmental degradation.
 6. We direct MoEF to comply with the directions issued by the Hon'ble Supreme Court in para 84 of the case of *In Re: Construction of Park at NOIDA Near Okhla Bird Sanctuary v. Union of India (UOI)*, (2011) 1 SCC 744.
40. There shall be no order as to costs.

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EXECUTIVE SUMMARY ANNEXURE 4 COLLY**[Extract]****1.1 GENERAL**

M/s Delta Corp Limited proposes to develop an integrated resort “Deltin Town” Project at Survey No. 243/1A, 263/1,264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1-A, 268/1,268/2, 268/3,268/4, 269/1, 280/1, 280/1-A, 280/1-B of Dhargalim Village, Pernem Taluka, North Goa District, Goa.

The proposed project comprises of a resort comprised of construction of Hotels, Convention Centre, Retail, Cinemas, Multi-Level Car Park, Water Park and related amenities. The entire project would be developed in an area of 3,20,170.6 sq. mt, which comprises of a resort including Hotel, Convention Centre, Retail, Cinemas, Multi-Level Car Parking, Water Park and related amenities. The total built-up area is 3,26,391.30 sq. mt.

As per the EIA notification, 2006 and its subsequent amendments, proposed Deltin Town development, having built up area of more than 1,50,000 sq.m is listed as project/activity 8(b) under category ‘B1’ – “Townships and Area Development projects” and will require prior environmental clearance from State level Environmental Impact Assessment Authority and detailed Environmental Impact Assessment report need to be prepared and submitted to the concerned authority.

M/s Delta Corp Limited has hired M/S. Rian Enviro Pvt Ltd to conduct the Environmental Impact Assessment study for the proposed project.

The ToR application submitted to SEIAA, Goa on 13.05.2022 with proposal No. SIA/GA/MIS/76836/2022. ToR was issued with F.No. SIA/GA/MIS/76836/2022/78 dated: 17.06.2022.

1.2 ENVIRONMENTAL SETTING

The environmental setting of the project are given in Table-below.

S.No.	Particulars	Details
1.	Name of Project Site	Proposed construction of Integrated resort project “Deltin Town” at Survey No. 243/1A, 263/1,264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1-A, 268/1,268/2, 268/3,268/4, 269/1, 280/1, 280/1-A, 280/1-B of Dhargalim Village, Pernem Taluka, North Goa District, Goa.
2.	Toposheet	The project Falls in 48E/14 SOI Toposheet
3.	Coordinates	Latitude 15°38'58.77"N to 15°39'53.62"N and Longitude 73°44'10.60"E to 73°55'41.43"E
4.	Total Plot area	3,20,170.6 sq. mt
5.	Built up area	3,26,391.30 sq. mt

Type of sensitivity	Distance (Aerial) from the project site (kms)
National parks, marine parks, sanctuaries, reserve forests, wild life habitats	None at project site and within 10 km radius of project site
Critically polluted areas as per MoEF notification	None at project site and within 10 km radius of project site

Integrated resort complexes (IRC) will bring various benefits such as:

1. **Economic Development:** The project will generate significant economic benefits through increased tourism, job creation, and investment in infrastructure.
2. **Improved Tourism:** The project will attract a large number of tourists and provide a diverse range of entertainment and leisure activities, thereby boosting the tourism industry.
3. **Job Creation:** The project will provide employment opportunities in various fields such as hospitality, tourism, entertainment, and retail.
4. **Increased Revenue:** The project will generate significant revenue for the government through taxes and other fees.
5. **Improved Infrastructure:** The project will spur development of infrastructure such as transportation, hospitality, and entertainment facilities, thereby improving the overall quality of life for the local population.

1.4: Scope of the study – details of regulatory scoping carried out (As per Terms of Reference)

The project is categorised under Township and Area Development falling under Schedule 8 (b), Category B1 of EIA notification 2006 and subsequent amendments thereof.

Application requesting Terms of Reference (ToR) for the project was submitted before Goa State Environmental Impact Assessment Authority (Goa SEIAA). Owing to changes in the master plan two subsequent amendments were applied. The ultimate Terms of Reference was accorded to the project on 10th February, 2023. Table 2 gives the chronicles of grant of Terms of Reference to the project.

Table 2 Chronicles of grant of Terms of Reference to the project

Sr. No.	Application	Date of Application	Date of Grant of ToR
1.	Application for ToR	11 th May 2022	17 th June 2022
2.	1 st Amendment in ToR	29 th November 2022	16 th December 2022
3.	2 nd Amendment in ToR	10 th January 2023	10 th February 2023

The copy of ultimate approved ToR is enclosed as **Annexure 1**. The report is prepared incorporating ultimate ToRs granted by Goa SEIAA on 10th February 2023. The structure of

Block Name	Floor	Built-up Area in m ²	Occupancy classification as per NBC, 2016	Building use
Block D	Ground Floor + 1 st Floor	28,384.50	Retail – 3 Sq.mtrs/Pax Restaurant – 1.8 Sq.mtrs/Pax	Retail, Restaurants
Retail Block (Block E)	Ground Floor	4,034.10	Retail – 3 Sq.mtrs/Pax	Retail
Convention Centre	Ground Floor	14,567.95	Hall - 1.4 Sq.mtrs/Pax Admin office = 10 Sq.mtrs/Pax	Halls & Office
Water Park		14,889.03	7.5 Sq.mtrs./Pax as received from water park experts	Water Park Blocks (B1,B2, B3,B4,B5,B6,B7,B8,B9 ,B10+MB5,B11,B12,B 13,B14,B15,B16,B22,B 27+MB4, MB1, MB2, MB3, MB6, Pump Room)
STP Block		3,000		
Cinema Block		1,197.25	Ground floor – 636 seating capacity First Floor – 401 seating capacity	
Block A, B, C – Swimming Pool & Water Body		3,353		
Water Park-Swimming Pool & Water Body		10,795.45		
Total		3,26,391.30		

The total maximum occupancy is estimated at 45,161. Of which the staff occupancy for the project is estimated as 10,401. The rest of the occupancy of 34,760 will arise from the tourist/guest. The cost of the project is estimated as 1892.60 Crores.

2.5: Proposed schedule for approval and implementation

Water and Wastewater management – Construction and Operation phase

Construction Phase

The daily water demand during the construction phase varies depending on the construction stage of the project. The stage wise water demand is depicted in tabulated in Table 6. The maximum daily water demand (648 KLD) is estimated in third stage of construction i.e October 2024 to September 2025.

Table 5 Water Demand in Construction phase

Construction stages	Period	Fresh Water in KLD	Re-cycled water from STP KLD	Total Water Demand KLD	Remarks
Stage 1	April 2023 to September 2023 (182 days)	90	45	135	33% of water demand met through re-cycled water
Stage 2	October 2023 to September 2023 (365 days)	270	135	405	33% of water demand met through re-cycled water
Stage 3	October 2024 to September 2025 (364 days)	432	216	648	33% of water demand met through re-cycled water
Stage 4	October 2025 to September 2026 (364 days)	135	67	202	33% of water demand met through re-cycled water

The fresh/potable water demand during the construction phase is only for the domestic needs of the construction workers and will be met through the water sourced through water tankers. A temporary modular water treatment plant consisting of Reverse Osmosis (RO Plant) membrane process technology is proposed in the project site for treatment of water. The capacities of RO plant planned during different construction stages is tabulated in Table 7. The water balance chart for construction phase and the Sewage Treatment Plant (STP) treated water re-use scheme is shown in Figure 8 and 9. The location of RO plant and the STP planned during the construction phase is shown in Figure 10.

Table 6 Construction phase Reverse Osmosis plant capacity

Construction stages	Period	RO plant capacity in KLD
Stage 1	April 2023 to September 2023 (182 days)	100

Construction stages	Period	RO plant capacity in KLD
Stage 2	October 2023 to September 2023 (365 days)	300
Stage 3	October 2024 to September 2025 (364 days)	500
Stage 4	October 2025 to September 2026 (364 days)	200

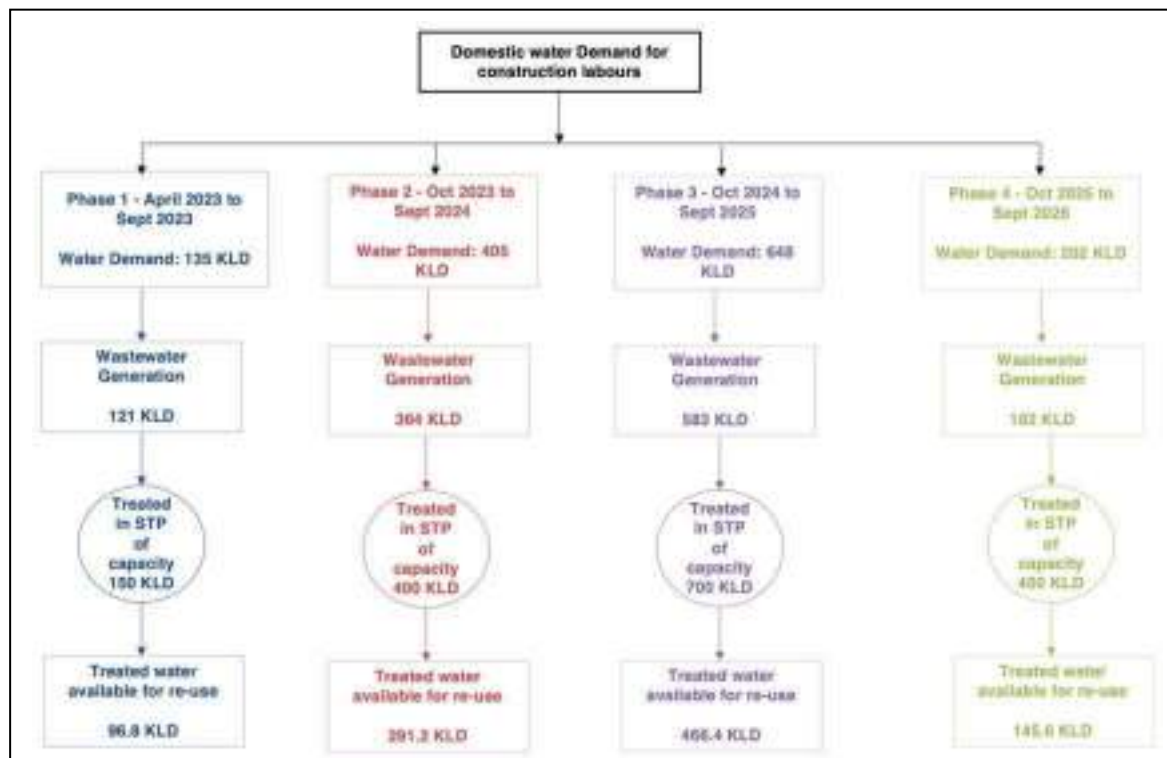


Figure 8 Water Balance Chart - Construction phase

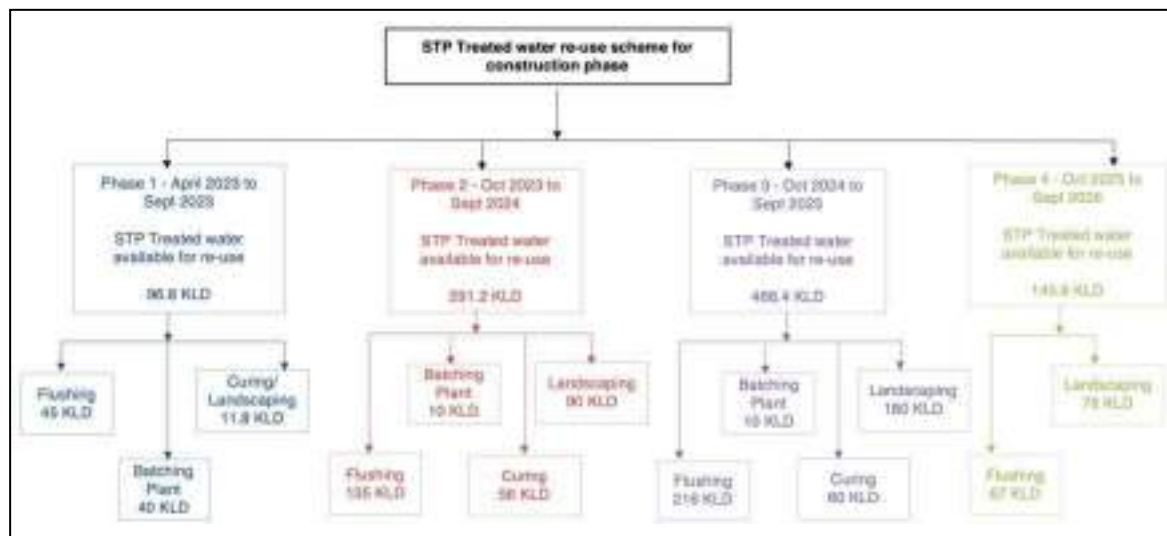


Figure 9 STP treated water re-use scheme - Construction phase

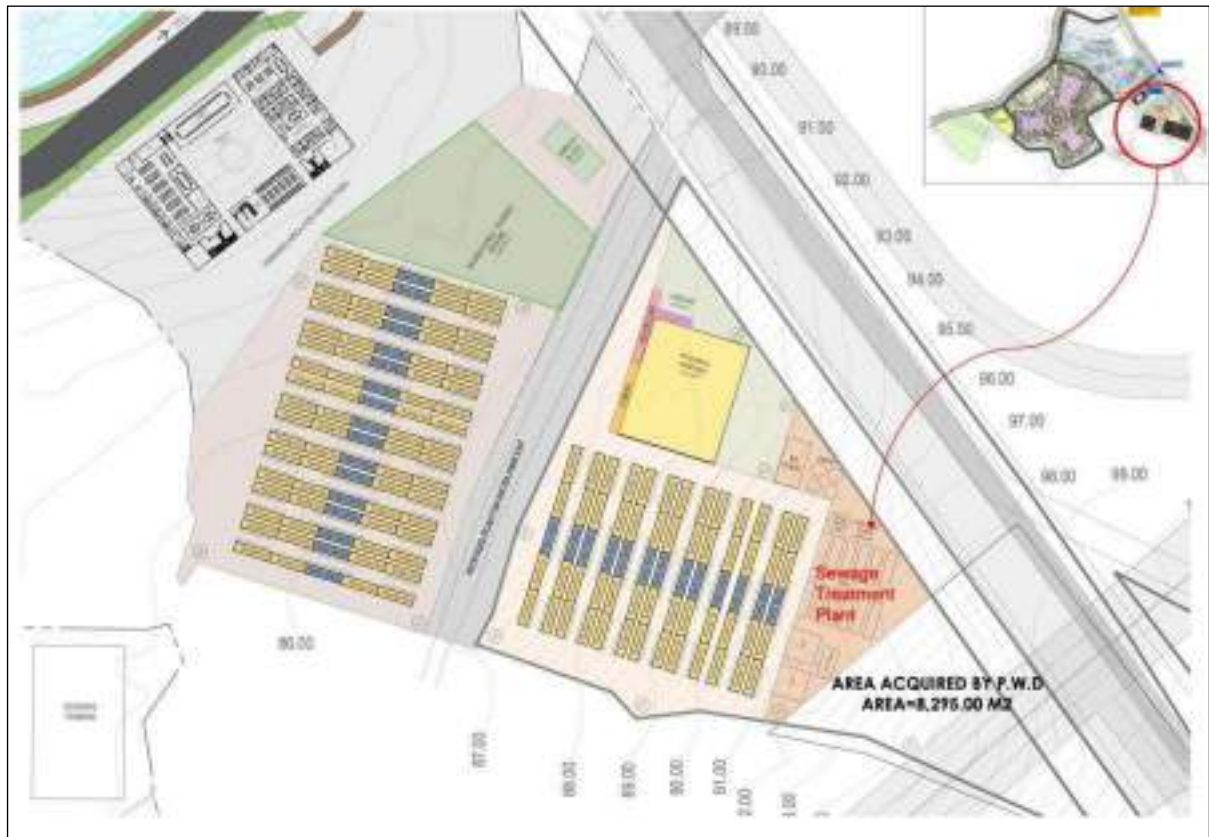


Figure 10 Construction phase RO plant and STP location

Operation Phase

The total maximum occupancy during the operation phase is estimated to be 45,161. The total first time water demand to start the operation of the project is estimated to be 22,760 KL which comprises of water demand for swimming pools, water park, cooling tower, fire tanks and other domestic demand. The initial capital water demand is proposed to be met from water tankers and Government supply (if made available during the course of completion of project). The total recurring water demand for the project is 4,494 KLD which will be met through water tankers, Government supply (if made available by the time of operation of project), rainwater harvested in rainwater harvesting tanks (during monsoons) and in house Sewage and Effluent Treatment Plant treated water. The Figure 11 shows the percentage sharing graph of recurring water demand. The Table 8 gives the distribution of water around different heads of consumption.

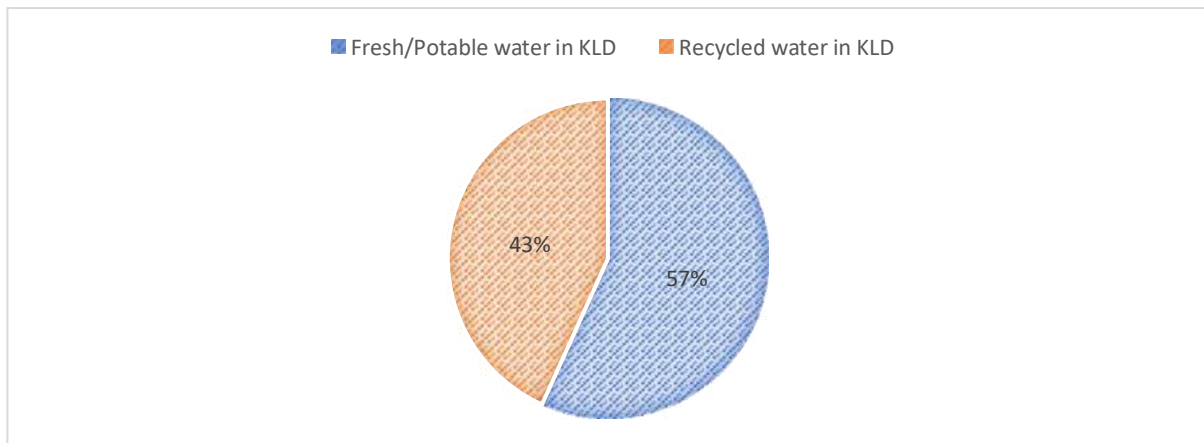


Figure 11 Percentage sharing graph of total water demand

Table 7 Distribution of water around different heads of consumption - Operation phase

Demand Heads	Fresh/Potable water in KLD	Recycled water in KLD	Total demand in KLD
Domestic water demand	1,126	0	1,126
Flushing demand	0	682	682
Laundry	367	0	367
Swimming pool make-up water	1,019	0	1,019
Landscape	0	270	270
STP filter back wash	0	68	68
Cooling tower	39	923	962
Total	2,551	1,943	4,494
Percentage of total water demand (%)	56.76457499	43.23542501	100

It is proposed to install two Sewage Treatment Plant (STP), one dedicated STP of capacity 150 KLD to cater the sewage generation from the water park (sewage generation from water park is estimated to be 139 KLD) and the other STP of capacity 2000 KLD to cater rest of the project (sewage generation from rest of the project is estimated to be 1500 KLD). A Effluent Treatment Plant (ETP) of capacity 400 KLD is proposed to treat the effluent from laundry. The water balance table for the project is presented in Table 9. The location of STPs and the ETP is shown in Figure 12.

Table 8 Water Balance of the project - Operation phase

In House STP treated water available for re-use	1605 KLD	To be re-used for meet flushing and cooling tower make up water
Re-use scheme of STP recycled water		
a. To meet the Flushing demand	682 KLD	

b. Cooling tower make up	923 KLD	
Additional water required for following heads		
a. STP filter backwash	68 KLD	
b. To meet the Landscaping demand	135 KLD	



Figure 12 Location of STPs and ETP - Operation phase

Solid Waste Management Plan

Construction phase

The estimated solid waste generation is tabulated as Table 10.

Table 9 Solid Waste Management Plan - Construction phase

Sr.No.	Type of waste	Estimated Quantity	Units	Management Plan
1.	Municipal waste	1019	Kg/day	Proposed to be segregated at source using 200 L garbage bins
a.	Bio-degradable municipal waste	407.6	Kg/day	Proposed to be treated in-house in bio-gassifier and Organic Waste Convertor

Sr.No.	Type of waste	Estimated Quantity	Units	Management Plan
b.	Non Bio-degradable municipal waste	611.4	Kg/day	Proposed to be given to recyclers
2.	Sewage Treatment Plant Sludge	260 Min 1257 Max	Kg/day	Proposed to be treated in-house in bio-gassifier
3.	Hazardous Waste – Used Oil/Spent Oil	1680	Litres/annum	Proposed to be recycled through CPCB/SPCB authorised recycler
4.	Construction debris			
a.	Quantity of cutting	1,42,464	Cu.meter	-
b.	Top soil	18,078	Cu.meter	Top soil will be stacked separately and used for landscaping
c.	Quantity of filling within the project	52,884	Cu.meter	-
d.	Balance for disposal	71,502	Cu.meter	Will be sold to the road contractors

Note on calculation of Cut-Fill quantities

1. The Quantity mentioned above is approximate due to unavailability of grid wise level NGL plan.
2. Average depth consider as mentioned in the drawing.
3. Sloping offset quantum is not considered in cutting.

Operation Phase

The solid waste generation estimated during the operation phase is tabulated in Table 11. It is also proposed to use glass bottles throughout the hotel facilities instead of plastic bottles. For this an inhouse bottling plant is also proposed to be installed.

Table 10 Solid Waste Management Plan - Operation phase

Sr. No.	Type of waste	Estimated Quantity	Units	Management Plan
1.	Municipal waste	9948	Kg/day	Proposed to be segregated at source using 200 L garbage bins
a.	Bio-degradable municipal waste	3879.2	Kg/day	Proposed to be treated in-house in bio-gassifier
b.	Landscape waste	250	Kg/day	Proposed to be treated in-house in bio-gassifier
b.	Non Bio-degradable municipal waste	5818.8	Kg/day	Proposed to be given to recyclers

Sr. No.	Type of waste	Estimated Quantity	Units	Management Plan
2.	Sewage Treatment Plant Sludge	246	Kg/day	Proposed to be treated in-house in bio-gassifier
3	Hazardous Waste			
3.	Used Oil/Spent Oil	5600	Litres/annum	Proposed to be recycled through CPCB/SPCB authorised recycler
b.	ETP sludge	55	Kg/day	Dewatering followed by disposal for cement co-processing unit.
4.	Construction debris			
a.	Quantity of cutting	1,42,464	Cu.meter	-
b.	Top soil	18,078	Cu.meter	Top soil will be stacked separately and used for landscaping
c.	Quantity of filling within the project	52,884	Cu.meter	-
d.	Balance for disposal	71,502	Cu.meter	Will be sold to the road contractors

Electricity

Construction phase

The electricity requirement will vary as per development of different construction stages. The stage wise estimated electricity requirement for the project is tabulated in Table 12. It is proposed to source the electricity from Goa Electricity Department, Government of Goa. As a backup power source during power failure, a 2000 KVA Diesel Generator is proposed.

Table 11 Electricity requirement in construction phase

Construction stages	Period	Electricity requirement in KVA
Stage 1	April 2023 to September 2023 (182 days)	625
Stage 2	October 2023 to September 2023 (365 days)	1625
Stage 3	October 2024 to September 2025 (364 days)	2500
Stage 4	October 2025 to September 2026 (364 days)	625

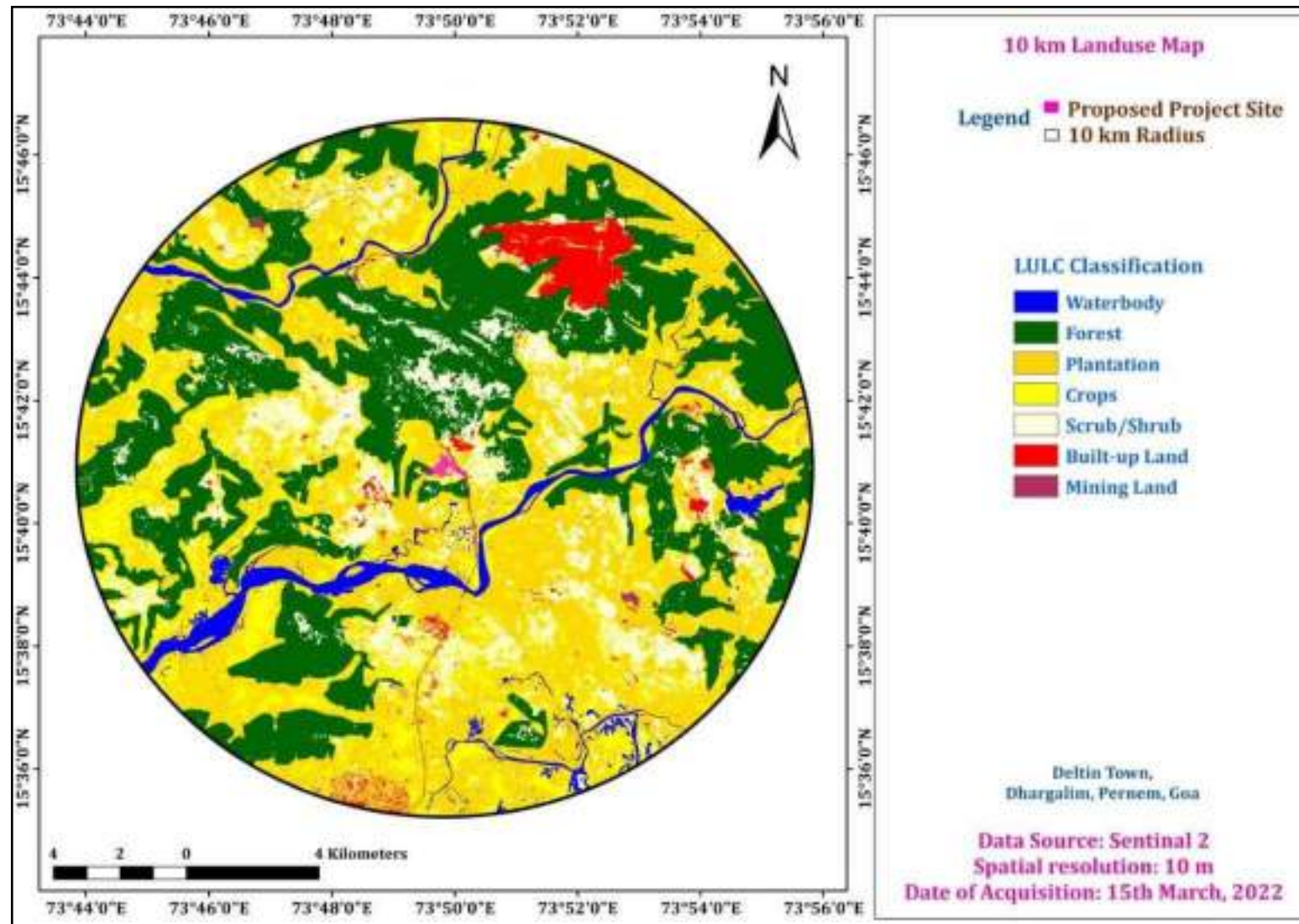


Figure 27 LU/LC map of the study area

Table 17 LU/LC and Its Coverage In Study Area

S.No	Level I	Level -II	Area (Km ²)	Percentage (%)
1	Built-up Land	Built-up Land	10.45	3.30
2	Forest	Dense jungle	104.67	33.15
3	Agricultural Land	Crops	39.7	12.57
4	Waste Land	Plantation	111.5	35.31
		Scrub/shrub	35.98	11.39
5	Water Body	Water Body	13.21	4.18
6	Others	Mining land	0.22	0.069
Total			315.73	100

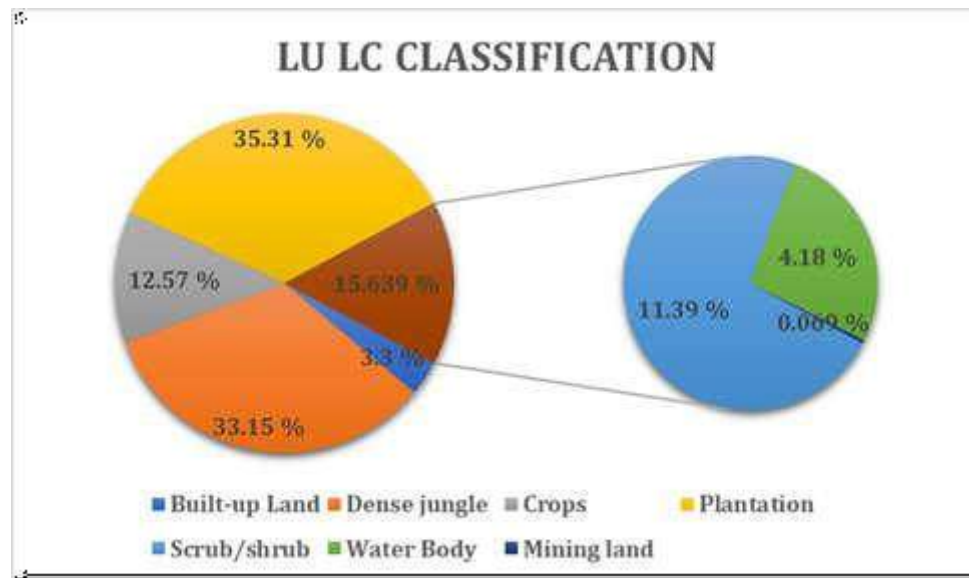
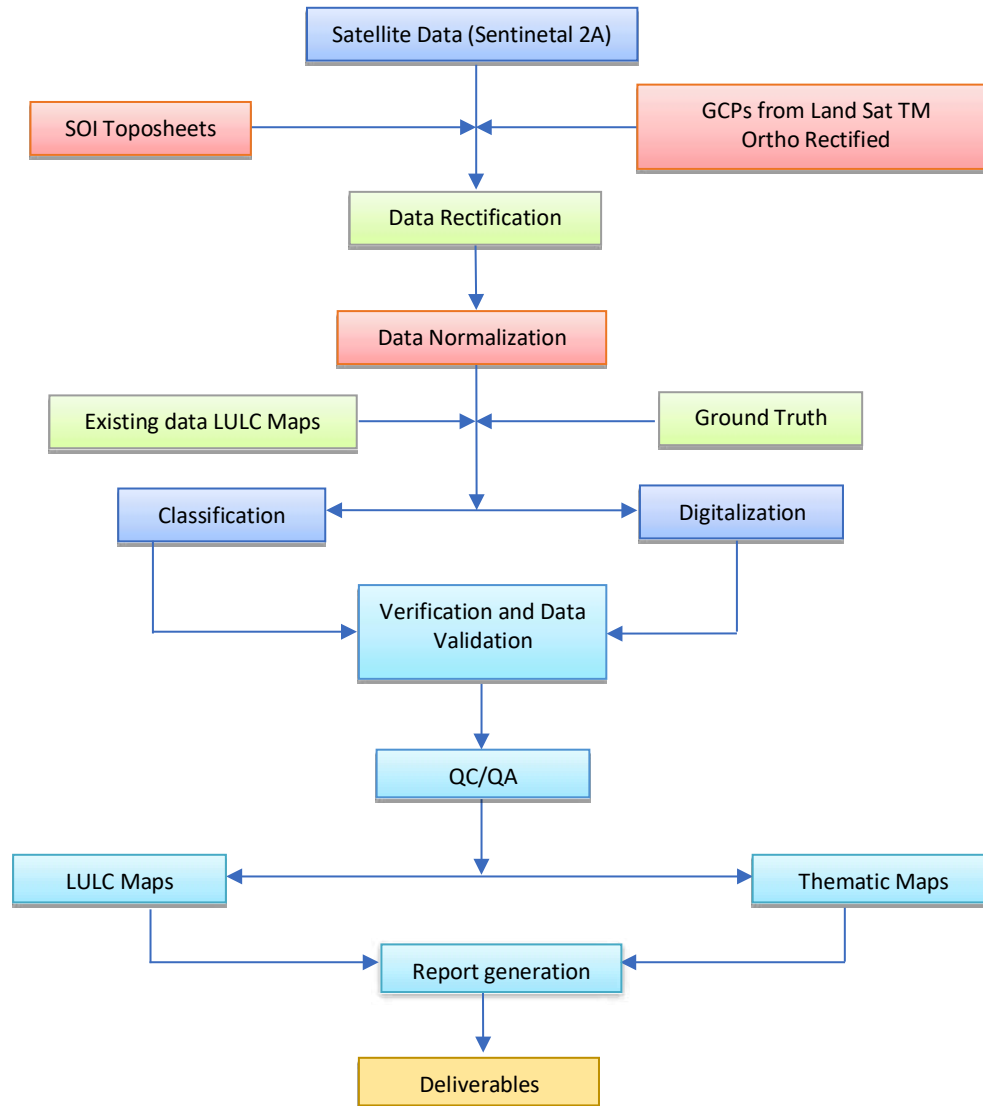


Figure 28 Pie Chart of the LU/LC classification of the study area

Figure 31 shows the geomorphology map of the buffer zone. The project site is not affected by the flood plain of chapora river.

FLOW CHART OF METHODOLOGY



Data set used for study

In order to strengthen the baseline information on existing land use pattern, the following data covering the proposed project site as well as the 10 km radius from the periphery of the project site i.e. 15°38'58.77"N to 15°39'53.62"N latitude and 73°44'10.60"E to 73°55'41.43"E longitude and elevation 0 to 104 meter are observed. The project is in Survey of India Toposheet no 48E/14 while 10 km radius study area covers three Toposheets 48E/10, 48E/13 & 48E/14.

Satellite/ Image	Sensor	Spatial resolution	Date of Acquisition
Sentinel-2A	Sentinel-2	10 m	15th March 2022
Cartosat	IRS Cartosat I	2.45m	2014

3.1.2 : Land use and Land cover of core zone

The land use/land cover of the project site is tabulated in Table 16.

Table 15 Land use of the project site

Survey Nos. under development	Total area As per 1 & 14	Area in Sqm	Type of Land	As per Regional Plan 2021
264/1	96,421.70	56129	Dry crop	Orchard, Irrigation command areas
265/1	230671	5700	Garden	
265/2	20,284.30	550	Dry crop	
265/25	68,821.60	1725	Dry crop	
265/26	40,493.60	1025	Dry crop	
266/1	84,515.40	41100	Dry crop	Settlement Area
267/1	2,87,093	26600	Dry crop	Orchard, Irrigation command areas
267/1-A	2,87,093	26600	Dry crop	
268/1	98,821.60	31855	Dry crop	Settlement Area
268/2	275186	6800	Dry crop	Settlement Area
268/3	3,76,408	9388	Dry crop	Settlement Area
268/4	34,356.10	10675	Dry crop	Settlement Area
269/1	2,34,483	24756	Dry crop	Settlement Area
280/1	4,54,456	57191	Dry crop	Settlement Area
280/1-A	1,43,576	12947.6	Dry crop	Settlement Area
280/1-B	3,68,329	7129	Dry crop	Settlement Area
		320170.6		
263/1	191874	26142	Garden	
243/1-A	40000	40000	Garden	

The project land is not under any agricultural cultivation.

3.1.3 : Land use and Land cover of buffer zone

A. False Color Composite Map of study area

The False Color Composite (FCC) map of study area is showed in Figure 25 . The False Colour image helps to reveal and enhance features which are otherwise not visible or poorly visible to a human eye. The FCC map is a multispectral image that uses standard RGB band range (Red, Green and Blue). The standard FCC signature colours are tabulated in Table 17.

Table 16 Colour Signatures on Standard False Colour Composite (FCC) of Earth Surface Features

Sr.No.	Earth Surface Features	Visible colour of FCC
1	Healthy Vegetation and Cultivated Areas	
	Evergreen	Red to Magenta
	Deciduous	Brown to Red
	Scrubs	Light Brown with Red Patches

Sr.No.	Earth Surface Features	Visible colour of FCC
	Cropped land	Pink to Bright red
	Fallow land	Light blue to white
	Wetland vegetation	Blue to grey with Red Patches
2	Water body	
	Clear water	Dark blue to black
	Turbid waterbody	Light blue
	Salt Pans	White-Brown to White
	Aqua-Farms	Dull Green-White-Brown to White
3	Built-up Area	
	High density	Dark blue to bluish green
	Low density	Light blue
	Industrial Area	Dark blue to bluish green Bigger Patches
4	Waste lands/Rock outcrops	
	Rock outcrops	Light brown
	Sandy deserts/River sand/	Light blue to white
	Salt affected Deep ravines	Dark green
	Shallow ravines	Light green
	Water logged/Wet lands	Metalled black
	Mud/Mud Flats	Greenish Brown-Light Brown

CHAPTER 8: PROJECT BENEFITS

An Integrated Resort Complex (IRC) can bring a range of benefits to a community, including:

1. **Economic Development:** The project will help to stimulate local economic growth by creating new jobs, attracting tourists and investment, and generating tax revenue. This can help to improve local living standards and stimulate regional development. During construction phase it is estimated to employ around 4000 unskilled and semi-skilled besides other skilled contractual experts and workers for completion of project. During operation phase, project will generate a permanent employment of 8704.
2. **Tourism Development:** Project will help to promote tourism by providing a diverse range of attractions, facilities, and services to visitors. This will thus help to attract more tourists to the area and boost the local economy through increased spending and investment.
3. **Improved Infrastructure:** Project will result in the improvement of local infrastructure, including roads, transportation systems, water and sewer systems, and other public facilities.
4. **Community Development:** Project will help to enhance the social and cultural fabric of a community, by providing recreational and cultural amenities, as well as opportunities for community engagement and involvement.
5. **Environmental Benefits:** With planning and design, the project promotes sustainable development by providing green spaces, low-impact building design, water conservation measures, wastewater reuse-recycle, energy conservation measures, rain water recharges, in-house solid waste management etc.
6. **Revenues for government:** The project will generate significant revenue for the government, through taxes and other fees, which can be used to support social and infrastructure projects.
7. **Increased real estate value:** The project will result in an increase in real estate values in the surrounding areas, providing benefits to property owners.

APPENDIX - II - FORM-1 A: CHECK LIST OF ENVIRONMENTAL IMPACTS**1. LAND ENVIRONMENT:**

- 1.1 Will the existing land use get significantly altered from the project that is not consistent with the surroundings? (Proposed land use must conform to the approved Master Plan / Development Plan of the area. Change of land use if any and the statutory approval from the competent authority are submitted). Attach Maps of**

- (i) Site location,
- (ii) Surrounding features of the proposed site (within 500 meters)
- (iii) Contour plan

The proposed project is an Integrated Resort project. Approval from IPB is obtained. Site Location and surrounding features is attached as Kml file.

- 1.2 List out all the major project requirements in terms of the land area, built up area, water consumption, power requirement, connectivity, community facilities, parking needs etc.**

Total plot area: 20,61,466.30 sq.mt

Total BUA: 3,28,076 sq.mt

Water Consumption**Operation phase**

Total Domestic consumption / day = 1248 m3

Total Hot water consumption / day = 426 m3

Total for flush water consumption /day = 1999 m3

Water theme park consumption /day = 248 m3

Total Water demand: 3921 m3/day

Source – Govt. water supply, borewell and water tankers to meet fresh water demand

STP treated water to meet flushing demand

POWER REQUIREMENT:

Operation Phase:

Total Electrical demand load: 21 MVA

Source: Goa State Electricity Board

Back-up power source: 11 Nos. 11 KV Diesel Generator sets

CONNECTIVITY:

Nearest railway station is Pernem railway station at distance of approx. 3.4 Km.

Nearest airport is Goa International Airport, Dabolim at distance of approx. 47.7 km

- 1.3 What are the likely impacts of the proposed activity on the existing facilities adjacent to the proposed site? (Such as open spaces, community facilities, details of the existing land use and disturbance to the local ecology).**

No impacts are envisaged.

- 1.4 Will there be any significant land disturbance resulting in erosion, subsidence & instability? (Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc may be given).**

No. The project will not cause any land disturbances. Geotechnical Report is attached as Annexure 1.

1.5 Will the proposal involve alteration of natural drainage systems? (Give details on a contour map showing the natural drainage near the proposed project site)

No.

1.6 What are the quantities of earthwork involved in the construction activity cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.)

No. Construction activity has not yet commenced at the project site.

1.7 Give details regarding water supply, waste handling etc. during the construction period.

Water supply: Source of water supply during construction phase for domestic use and for construction activity will be water tankers.

Waste handling:

Several types of construction debris such as bricks, blocks, steel packaging material, tiles, glass, furnishing etc. will be generated. The construction debris generated will be segregated and stored in separately earmarked area within project premises. Debris such as cut pieces of steel, glass etc. will be sold to recycler/scrap dealers.

Construction debris such as bricks, cut tiles etc. will be used for internal paving.

Substratum removed during foundation and excavation will be partly used as filling material within project premises for development of green belt area. Remaining shall be disposed through or sold to authorized contractor.

1.8 Will the low-lying areas & wetlands get altered? (Provide details of how low lying and wetlands are getting modified from the proposed activity)

No.

1.9 Whether construction debris & waste during construction cause health hazard? (Give quantities of various types of wastes generated during construction including the construction labour and the means of disposal)

There are no health hazards as no potentially harmful substances will be used for the construction activity. Several types of construction debris such as bricks, blocks, steel packaging material, tiles, glass, furnishing etc. will be generated. The construction debris generated will be segregated and stored in separately earmarked area within project premises. Debris such as cut pieces of steel, glass etc. will be sold to recycler/scrap dealers. Construction debris such as bricks, cut tiles etc. will be used for internal paving to maximum extent possible.

Substratum removed during foundation and excavation will be partly used as filling material within project premises. Remaining shall be disposed through or sold to authorized contractor.

2. WATER ENVIRONMENT:

2.1 Give the total quantity of water requirement for the proposed project with the breakup of requirements for various uses. How will the water requirement met? State the sources & quantities and furnish a water balance statement.

Water Consumption:-

Operation phase:

Source: Govt. Water supply, Water tankers and Bore-well

Total Domestic consumption / day = 1248 m³

Total Hot water consumption / day = 426 m³

Total for flush water consumption /day = 1999 m³

Water theme park consumption /day = 248 m³

Total Water demand: 3921 m³/day

2.2 What is the capacity (dependable flow or yield) of the proposed source of water?

The total domestic water demand of 1248 m³/day is proposed to be obtained from Government water supply, water tankers and bore-well.

2.3 What is the quality of water required, in case, the supply is not from a municipal source? (Provide physical, chemical, biological characteristics with class of water quality)

Use of recycled water from the proposed sewage treatment plant will be made for flushing & gardening.

Characteristics of treated water

Parameter	Value
pH	6.0 – 8.5
BOD	Less than 10 Mg / L
Suspended Solids	Less than 20 Mg / L
COD	Less than 50 Mg / L
Oil & Grease	Less than 10 Mg / L

2.4 How much of the water requirement can be met from the recycling of treated wastewater? (Give the details of quantities, sources and usage)

Operation phase:

Quantity: 1999 m³/day as flushing demand, Source – STP treated water

Usage: Flushing, gardening

2.5 Will there be diversion of water from other users? (Please assess the impacts of the project on other existing uses and quantities of consumption)

No, water will not be diverted from other sources. Water requirement will be augmented by use of recycled treated water during operation phase.

2.6 What is the incremental pollution load from wastewater generated from the proposed activity? (Give details of the quantities and composition of wastewater generated from the proposed activity)

Characteristics of waste water

Parameter	Value
pH	7 – 8.5
BOD	120-180 Mg / L
Suspended Solids	200 – 450 Mg / L
COD	400-600 Mg / L
Oil & Grease	50 Mg / L
Detergents	50 – 100 Mg / L

2.7 Give details of the water requirements met from water harvesting? Furnish details of the facilities created.

Rain water harvesting of water from paved areas and water from the roof top, will be collected through rain water down take pipes which shall be connected to rain water harvesting ponds proposed in the project.

2.8 What would be the impact of the land use changes occurring due to the proposed project on the runoff characteristics (quantitative as well as qualitative) of the area in the post construction phase on a long-term basis? Would it aggravate the problems of flooding or water logging in any way?

No. The proposed project is an Integrated Resort. Run off characteristics will not change since the storm water drains will be built as per specifications of Town and Country Planning department. Proper storm water drainage system will be implemented in the project. The project will not

contribute to flooding or water logging.

2.9 What are the impacts of the proposal on the ground water? (Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any)

A well-designed rain water harvesting system will be implemented as part of the project.

2.10 What precautions/measures are taken to prevent the run-off from construction activities polluting land & aquifers? (Give details of quantities and the measures taken to avoid the adverse impacts)

Subsurface work will be carried out mostly during non-monsoon period. Construction area will be bunded/barricaded and care will be taken to divert run-off so that possibility of pollution from construction run-off will be prevented.

2.11 How is the storm water from within the site managed? (State the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indication contour levels)

The project will incorporate a well-designed storm water drainage system as per specification of TCP which will prevent flooding of the area.

2.12 Will the deployment of construction laborers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation)

No. Adequate temporary sanitation facilities and clean drinking water will be provided for the construction workers. It will be ensured that no accumulation of water will take place. Constructed toilets will be provided for construction laborers.

2.13 What on-site facilities are provided for the collection, treatment & safe disposal of sewage? (Give details of the quantities of wastewater generation, treatment capacities with technology & facilities for recycling and disposal)

During operation phase sewage generation is estimated to be approx. 3333 m³/day which will be treated in Sewage treatment plants of approximate capacity 3600 m³/day with MBR process. The treated water will be recycled to meet flushing demand & irrigation demand of the project.

2.14 Give details of dual plumbing system if treated waste used is used for flushing of toilets or any other use.

PWD water supply, water tanker supply and bore-well water will be used for domestic purpose. There will be separate lines & tanks for treated water to be used for flushing and gardening.

3 VEGETATION:**3.1 Is there any threat of the project to the biodiversity? (Give a description of the local ecosystem with its unique features, if any)**

Tree cutting permission for felling trees will be obtained from the Forest department.

3.2 Will the construction involve extensive clearing or modification of vegetation? (Provide a detailed account of the trees & vegetation affected by the project)

Tree cutting permission for felling trees will be obtained from the Forest department.

3.3 What are the measures proposed to be taken to minimize the likely impacts on important site features (Give details of proposal for tree plantation, landscaping, creation of water bodies etc along with a layout plan to an appropriate scale)

Landscaping along with greenbelt will be developed in the open spaces of the project.

4 FAUNA:**4.1 Is there likely to be any displacement of fauna- both terrestrial and aquatic or creation of barriers for their movement? Provide the details.**

No. Not applicable

4.2 Any direct or indirect impacts on the avifauna of the area? Provide details

Not envisaged.

4.3 Prescribe measures such as corridors, fish ladders etc. to mitigate adverse impacts on fauna

No. Not applicable.

5 AIR ENVIRONMENT:**5.1 Will the project increase atmospheric concentration of gases & result in heat islands? (Give details of background air quality levels with predicted values based on dispersion models taking into account the increased traffic generation as a result of the proposed constructions)**

The proposed plan includes sufficient landscape areas and will utilize energy efficient construction materials in the construction of the buildings. All these factors will together check and offset any heat island effects. There will be a temporary increase in air pollution particularly dust levels due to transport of materials, excavation and land development during the construction phase of the project. During operation phase, there will be a minor increase in air pollution due to increase in vehicular exhausts generated due to traffic and through operation of D.G sets.

5.2 What are the impacts on generation of dust, smoke, odorous fumes or other hazardous gases? Give details in relation to all the meteorological parameters.

There will be minor increase in SPM levels during the construction phase, which will be temporary in nature. During the operational phase of the project, vehicular exhausts and operation of DG sets will be the only source of air pollution.

5.3 Will the proposal create shortage of parking space for vehicles? Furnish details of the present level of transport infrastructure and measures proposed for improvement including the traffic management at the entry & exit to the project site.

Adequate parking space will be provided within project premises. A Multi-level Car parking facility is proposed in the project. Additionally, open parking for water park is proposed in the project.

5.4 Provide details of the movement patterns with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., with areas under each category.

The project is located adjacent to the NH66. Entry/exits to the project site will be properly designed

and constructed so that the traffic from the project does not impinge on the main road. Internal roads of adequate width for traffic management within site will be designed.

5.5 Will there be significant increase in traffic noise & vibrations? Give details of the sources and the measures proposed for mitigation of the above.

No. The internal roads are designed with adequate width to minimize traffic congestion inside the plot. Mitigation measures employed to curb traffic noise and vibrations are as follows:

Construction phase

Use of sound generating equipment/ construction machinery having sound not greater than 90 dB. Noise generating construction activities will be carried out only during the day time. Construction workers will be provided with ear muffs/ear plugs.

Operation phase

The entry/exit to the site will be with adequate curvature at curbs so that the vehicles exiting/entering the building do not directly impinge on road traffic. Smooth flow of traffic will be ensured on the internal road to avoid idling of vehicles.

5.6 What will be the impact of DG sets & other equipment on noise levels & vibration in & ambient air quality around the project site? Provide details.

DG sets are proposed to supply power as the emergency supply system in case of shut down/break down of main power supply. All DG sets will be housed in noise insulated enclosures designed to meet standards as laid under Environment (Protection) Act. Noise and vibrations from DG sets will be eliminated with vibration mounts and silencers.

6 AESTHETICS:

6.1 Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes? Are these considerations taken into account by the proponents?

Project will have landscaped features to make it aesthetically pleasing.

6.2 Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account?

No. Not applicable. There will not be any adverse impacts from new construction. Excavated soil will be used for backfilling within project premises. Construction debris generated will be stored on site, will be used on-site for filling/roadway construction to the maximum extent possible and remaining will be disposed through authorized agency. Sewage generated will be treated and reused with no discharge to surrounding. Trees will be planted to give aesthetically pleasing appearance.

6.3 Whether there are any local considerations of urban form & urban design influencing the design criteria? They may be explicitly spelt out.

No. Not applicable.

6.4 Are there any anthropological or archaeological sites or artifacts nearby? State if any other significant features in the vicinity of the proposed site have been considered.

No.

7 SOCIOECONOMIC IMPACT:

7.1 Will the proposal result in any changes to the demographic structure of local population? Provide the details.

Yes, the project will result in marginal increase of population resulting in urbanization of the area.

7.2 Give details of the existing social infrastructure around the proposed project.

Redkar Hospital and Research Center is the existing social infrastructure close to the proposed development at a distance of 0.29 Km.

7.3 Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?

No. The project is development of an Integrated resort. The project will help improve the socio-economic conditions of locals in the nearby villages by creating direct and indirect employment opportunities. Additional measures taken will be as follows:

Construction Phase: Transportation of construction material to the site will be restricted to day time. Regular water spraying will be ensured at the project site to contain dust resulting from construction activities. Use of covered vehicles for transportation of materials will be ensured. Temporary barriers will be erected around the project site to reduce dust impact to nearby areas. Vehicles used for material transportation will be parked within the project site so as to not obstruct traffic on public road.

Operation phase: The entry/ exit to the site will be with adequate curvature at curbs so that vehicles exiting or entering the building do not impinge on road traffic. Regular maintenance & upkeep of internal roads will be ensured.

8 BUILDING MATERIAL:

8.1 May involve the use of building materials with high-embodied energy. Are the construction materials produced with energy efficient processes? (Give details of energy conservation measures in the selection of building materials and their energy efficiency)

The project is designed to be energy efficient and special care has been taken in the planning stage to ensure an efficient system. The salient features in the design and planning of the project aimed at energy conservation are:

- Energy efficient fluorescent tube lights & CFL lamps which give approx. 30% more light output for the same watts consumed and therefore require less nos. of fixtures and corresponding lower point wiring costs.
- All fluorescent light fixtures will be specified to incorporate electronic chokes, which have less watt-loss, compared to electromagnetic chokes and result in superior operating power factor. Electronic chokes also improve the life of the fluorescent lamps.
- Solar operated pole lights will be proposed to power pathway lights at some strategic locations
- Presence sensors & day-light sensors will be provided wherever feasible.

8.2 Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts?

Following measures will be taken to minimize the impacts caused by transportation & handling of materials during construction:

- Materials will be purchased from the nearest authorized supplier.
- Transportation of raw material will be done using covered trucks.
- The movement of these vehicles will be restricted to non-peak hours.
- Regular water spraying will be adopted on the site to prevent dust emissions.

8.3 Are recycled materials used in roads and structures? State the extent of savings achieved?

All structures are designed with minimum use of glass, wood, aluminum and composite panel etc. Recycled water will be used during the operation phase to meet flushing and gardening water requirement. Substratum to be removed during foundation and excavation will be partly used for plot filling, making pathways, and for making beds for landscape development in the project.

8.4 Give details of the methods of collection, segregation & disposal of the garbage generated during the operation phases of the project.

Provisions for segregation of Solid waste will be provided in the project i.e, separate bins will be provided for collection of dry and wet waste. Designated area earmarked for storage of segregated solid waste will be provided within project premises. Dry waste collected in garbage bins will be handed over to authorized agency for disposal. Wet waste to be generated in the project will be treated in Organic Waste Converters proposed to be installed in the project. Compost produced will be used as manure for gardening.

9 ENERGY CONSERVATION:

9.1 Give details of the power requirements, source of supply, backup source etc. What is the energy consumption assumed per square foot of built-up area? How have you tried to minimize energy consumption?

POWER REQUIREMENT:

Source: Goa State Electricity Board.

Requirement:

Operation phase:

Total estimated load: 21 MVA

Source: Goa State Electricity Board

Back-up power source: 11 Nos. 11 KV D.G sets

Use of Solar energy is proposed to meet approx. 5% of the total energy requirement of the project. Solar energy will be used to power part of the external light fixtures and/or will be used for water heating.

9.2 What type of, and capacity of, power back-up to you plan to provide?

DG sets 11 Nos. of 11 KV capacity will be provided as back- up power source.

9.3 What are the characteristics of the glass you plan to use? Provide specifications of its characteristics related to both short wave and long wave radiation?

Minimum amount of glass will be used. Only plain annealed glass will be used.

9.4 What passive solar architectural features are being used in the building? Illustrate the applications made in the proposed project.

The use of natural lighting through design to the maximum extent possible will be incorporated in the project. Only plain annealed glass will be used.

9.5 Does the layout of streets & buildings maximum the potential for solar energy devices? Have you considered the use of street lighting, emergency lighting and solar hot water systems for use in the building complex? Substantiate with details.

Solar energy will be used to power part of the external light fixtures and/or will be used for water heating.

9.6 Is shading effectively used to reduce cooling/heating loads? What principles have been used to maximize the shading of Walls on the East and the West and the Roof? How much energy saving has been affected?

Yes, attempts will be made to maximize the use of natural lighting through design.

Only plain annealed glass will be used/incorporated in the project. Besides this, a green cover consisting of native species trees with large canopy size will be made within the project.

9.7 Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details. Provide details of the transformers and motor efficiencies, lighting intensity and air-conditioning load assumptions? Are you using CFC and HCFC free chillers? Provide specifications.

Lighting: Lighting of Common Area, Utility Rooms shall be based on the following average lighting level considerations which are as per NBC 2005.

Area/Space Average Illumination Range in lux Type of Lamps/Fixtures

Service areas/Utility Areas such as DG Set Room, substation area, Electrical Room, Pump Room, Plant Room. 100-150-200 T-5's Fluorescent/MH Lamps in high bay area.

External and Landscaping lighting shall be provided in consultation with the landscape architect. Road, Parking and Area lighting shall be provided for visual guidance and security purposes. Around 5 to 10 lux shall be maintained for road lighting. Pathways, Garden and landscape lighting shall be designed keeping in mind the architectural features.

Area/Space Average Illumination

Range in lux Type of Lamps /Fixtures

Road and Parking Areas 5 to 10 Lux HPSV/MHI lamps in street light fixtures mounted on 6 to 7 m High poles.

Path and landscape areas. Aesthetics more important Bollards with CFL's

Energy Conservation Measures for lighting:

Using energy efficient light fixtures with good photometric properties. Using

CFL's in external lighting bollards.

Using T-5 (28W) fluorescent lamps in place of T-8 lamps (26W) in basements, stilts and underground parking areas.

Putting external lighting control on time switch /timer control. Using time switch control / timer control for basements lighting. Employing LED light sources for some of the external lighting fixtures. Employing solar powered lighting for part of the external lighting fixtures.

9.8 What are the likely effects of the building activity in altering the micro-climates? Provide a self-assessment on the likely impacts of the proposed construction on creation of heat island & inversion effects?

Energy conservation will be one of the main focuses during the building design and planning stage. Attempts will be made to maximize use of natural lighting in the project. A green cover consisting of trees of native species with large canopy size will be made. All these factors will help in reducing heat island effects.

9.9 What are the thermal characteristics of the building envelope? (a) roof; (b) external walls; and (c) fenestration? Give details of the material used and the U-values or the R values of the individual components.

(a.) Roof design: Roof will meet prescriptive requirement as per ECBC by using appropriate thermal insulation material to fulfill requirement.

(b.) Vertical fenestration: Vertical fenestration will comply with SHGC requirements to meet prescriptive requirement as per ECBC by use of appropriate solar control strategies.

(c.) Glazing: Tinted glass absorbs a large fraction of the incoming solar Radiation through a window. This reduces the solar heat gain coefficient, visible transmittance, and glare.

Following is the Envelope Performance Factor coefficients for building with 24 hour occupancy located in hot humid climate

Envelope Performance Factor Coefficients

Building

Components	U-factor		
(W/sq mtr deg C)		R-Value	
(sq mtr deg C/W)		SHGC	
Vertical			
Fenestration	3.17	---	0.2 to 0.25
Walls, 0.35	2.35	-	
Roofs 0.26	3.5	-	

9.10 What precautions & safety measures are proposed against fire hazards? Furnish details of emergency plans.

All necessary safety measures will be incorporated to avoid any accidents during the construction phase and operation phase of the project. Buildings will have sufficient open spaces all around to have easy turning for fire engines. Emergency exit staircases will be provided in all buildings. Adequate passage way clearance will be provided for entry of fire fighting vehicles into project premises. Fire NOC will be obtained from the Department of Fire & Emergency Services.

9.11 If you are using glass as wall material provides details and specifications including emissivity and thermal characteristics.

The specifications including emissive & thermal characteristics are as follows:

Characteristics of Vertical Fenestration

Climate Zone WWR<40% 40%<WWR<60% VLT

Maximum U factor (w/sq mtr deg C) Maximum

SHGC Maximum m SHGC 0.27 (For WWR

0.03) and 0.2 (For WWR 0.31-0.4)

Warm and Humid 3.3 0.25 0.

9.12 What is the rate of air infiltration into the building? Provide details of how you are mitigating the effects of infiltration.

Mechanical ventilation & exhaust will be provided for the following spaces: Mechanical plant rooms, Pump rooms, STP, DG room, electrical substation & panel rooms, Kitchen and toilets.

Fans will be centrifugal limit load, centrifugal cabinet, axial flow or propeller type depending on the application.

Fans will be complete with filters and gravity louvers wherever required.

9.13 To what extent the non-conventional energy technologies are utilized in the overall energy consumption? Provide details of the renewable energy technologies used.

Use of solar energy is proposed in the project to meet approx. 5% of the total energy requirement. Solar energy will be used for part of the external lighting fixtures and /or for water heating.

10 ENVIRONMENTAL MANAGEMENT PLAN:

Environment Management Plan would consist of all mitigation measures for each activity to be undertaken during the construction, operation and the entire life cycle to minimize adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.

The Environment Management Plan Annexure 2 shows the stage wise activities that may be potential sources of pollution and the mitigation measures for the same.

ANNEXURE 2: ENVIRONMENTAL MANAGEMENT PLAN**During construction phase**

Activity	Equipments	Source Power/ Fuel	Environmental Impact on	Safety and Mitigation Measures
Excavation	JCB/ Poclain	Diesel	Air / Noise	- Water will be sprinkled periodically as especially during peak hours. - Storage of fuel in drums and separately identified area - Site barricading up to 3.6 mtr. height by GI sheets to minimize nuisance / dusting. - Workers to be provided with ear plugs / earmuffs
Refilling of earthwork	Dumpers	Diesel	Air / Noise	Vehicle emission control limited to excavation period only.
Plinth work / RCC	Mixers	Electric	Air / Dust	Cement covered with gunny bags / water sprinkling on metal, sand
RCC Foundation	Mixers	Electric	Air / Dust	Cement covered with gunny bags / water sprinkling on metal, sand
RCC Superstructure	Lifts / Mixers	Electric	Air / Dust	Cement covered with gunny bags / water sprinkling on metal, sand
Brickwork	Lift / Water Pumps	Electric	Air / Dust	Cement covered with gunny bags / water sprinkling on bricks
Plaster	Lift / water pumps	Electric	Air / Dust	Cement covered with gunny bags / water sprinkling on cement PPE / Safety Nets / Safety Belts for workers
Flooring	Cutting M/C	Electric	Noise	Low noise equipment to be used, workers to be provided with Ear Plugs / Earmuffs
Fabrication	Welding / Cutting	Electric	Noise	Low noise equipment to be used workers to be provided with Ear Plugs / Earmuffs
Painting	Manually	Manually	---	Hand Gloves / Dust masks / Safety Belts to workers
Fire Fighting / Electric Lifts / Terrace work	Electric Drills	Electric	Noise	Electrical safety measures / low noise equipment

Paving	Cutting M/C / Concrete Mixer	Electric	Noise	Low noise equipment / dust arrestors / water sprinklers for dust
Drinking Water / Labour Health / Welfare / Accidents	All Equipments / Machinery And Electrical shock	Health	Water Contamination / Accidents	Storage in HDPE closed tanks / disinfection of water / domestic waste treated in septic tanks and disposed off in soak pits First aid / medical checkup facility to workers. Fire and safety measures. PPE to all workers. All works will be covered under personal accident policy.

During operation phase

ACTIVITY	EQUIPMENTS	SOURCE POWER/ FUEL	ENVIRONMENTAL IMPACT	SAFETY AND MITIGATION MEASURES
Water Supply to Buildings	Water Pumps	Electric	Noise	Use of Low Noise Equipments Equipments to be Installed in Closed room
Electric Failure	DG Sets	Diesel	Air / Noise	• Installation of salient / Green Zone Equipments as per CPCB guide lines • Exhaust up to 5.0 meter above roof top • Separate DG Set room • Storage of Diesel and Waste Oil in separate identified drums and disposed off through CPCB/SPCB registered vendor. • Workers to be provided with Ear Plugs / Earmuffs
Waste Water	STP / Electric Pumps	Electric	Water / Air	• 24 Hrs running STP. • Periodic testing of Treated Effluent • Use of Low Noise Pumps and Equipments • Separate and Closed room for STP System.
Non biodegradable Solid Waste	Segregation of Waste	Manual at Source	Air	Will be disposed off through authorized disposal facility

Biodegradable Solid waste	Segregation of waste	Manual at Source	Air	Will be disposed off through Organic Waste Converter
Hazardous Waste	D.G. Set / Pumps	Lubricant Oil	Air / Water	• Storage of Diesel and Waste Oil in Separate Identified Drums • Sale of Waste Oil to CPCB Approved Vendors • Workers to be provided with Personal Protective Equipments.

ANNEXURE 6

NOTE :
+100.00M LVL IN ARCHITECTURE DRAWING CORRESPONDS TO +98.00M LVL IN SURVEY DRAWING.
ARCHITECTURE LEVEL TO BE READ IN CONJUNCTION WITH SURVEY DRAWING

LEGEND

WATER PARK AREA

SITE BOUNDARY

30 METER WIDE ROAD

NO ALCOHOL LINE

PROPOSED ROAD LINK TO MOPA AIRPORT

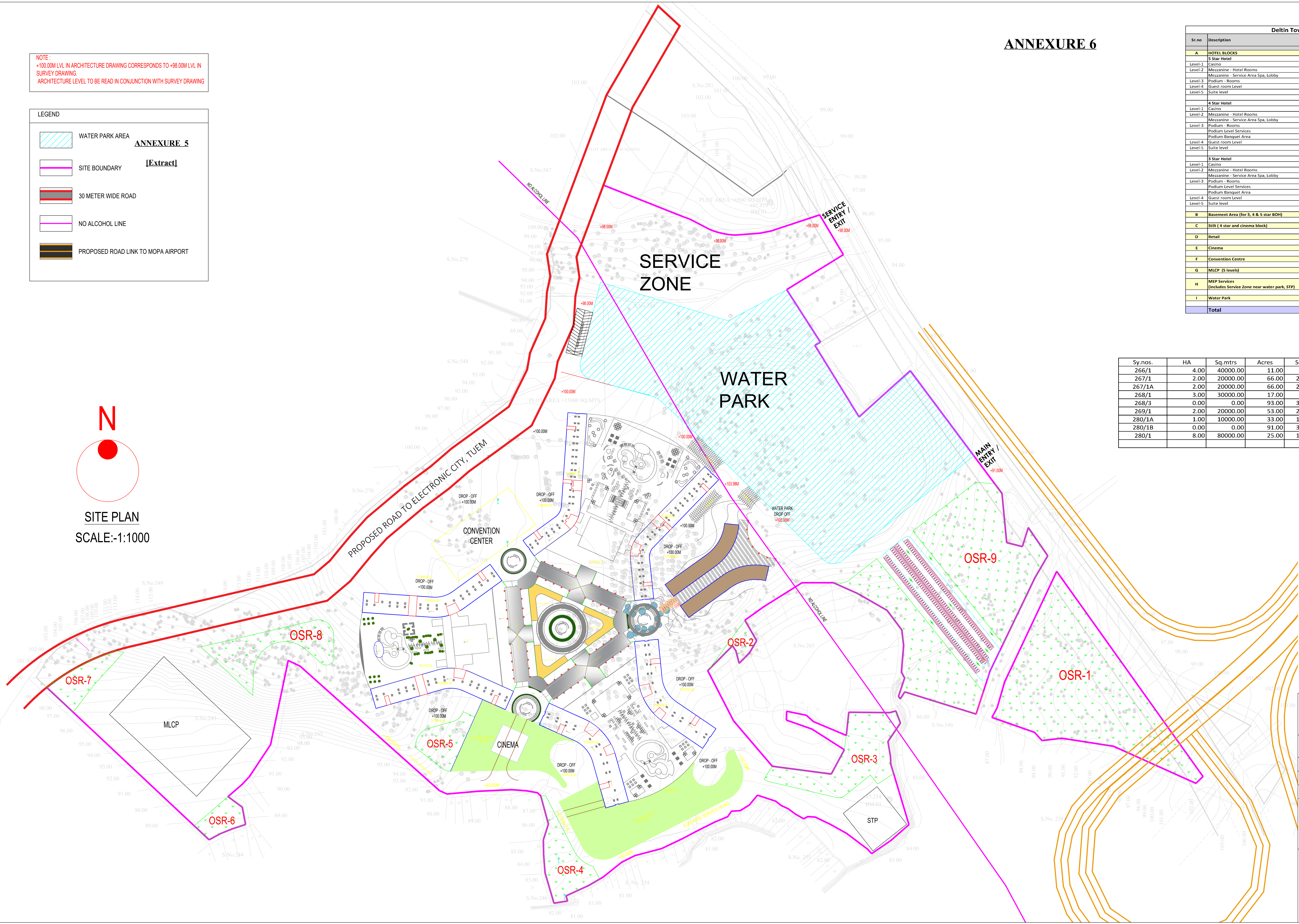
ANNEXURE 5

[Extract]

N

SITE PLAN

SCALE:-1:1000



Deltin Town - Built up Area				
Sr.no	Description	Area		Keys
A		Sq.mtr	Sq.ft	
HOTEL BLOCKS		1,72,462	18,56,377	1,164
5 Star Hotel		52,071	5,60,492	272
Level-1	Casino	17,151	1,84,613	
Level-2	Mezzanine - Hotel Rooms	4,386	45,958	48
Level-3	Mezzanine - Service Area Spa, Lobby	11,015	1,18,565	
Level-3	Podium - Rooms	6,573	70,752	84
Level-4	Guest room Level	6,573	70,752	90
Level-5	Suite level	6,573	70,752	50
4 Star Hotel		55,180	5,93,953	354
Level-1	Casino	17,886	1,92,526	
Level-2	Mezzanine - Hotel Rooms	4,346	46,780	66
Level-2	Mezzanine - Service Area Spa, Lobby	11,898	1,28,065	
Level-3	Podium - Rooms	6,244	66,130	108
Level-3	Podium Level Services	218	2,345	
Level-3	Podium Banquet Area	1,968	21,189	
Level-4	Guest room Level	6,360	68,459	114
Level-5	Suite level	6,360	68,459	66
3 Star Hotel		65,211	7,01,931	538
Level-1	Casino	22,633	2,43,622	
Level-2	Mezzanine - Hotel Rooms	4,733	50,946	80
Level-2	Mezzanine - Service Area Spa, Lobby	16,008	1,73,310	
Level-3	Podium - Rooms	6,072	65,359	150
Level-3	Podium Level Services	468	5,038	
Level-3	Podium Banquet Area	2,217	23,864	
Level-4	Guest room Level	6,540	70,397	154
Level-5	Suite level	6,540	70,397	154
B		41,840	4,50,366	
C		28,903	3,11,112	
D		6,671	71,807	
E		900	9,688	
F		6,000	64,584	
G		50,000	5,38,200	
H		10,000	1,07,640	
I		11,300	1,21,633	
Total		3,28,076	35,31,406	1,164

Sy.nos.	HA	Sq.mtrs	Acres	Sq.mtrs	Sq.mtrs	Total area in Sq.mtrs
266/1	4.00	40000.00	11.00	44515.46	0.00	84,515.46
267/1	2.00	20000.00	66.00	267092.76	0.00	2,87,092.76
267/1A	2.00	20000.00	66.00	267092.76	0.00	2,87,092.76
268/1	3.00	30000.00	17.00	68796.62	25.00	98,821.62
268/3	0.00	0.00	93.00	376357.98	50.00	3,76,407.98
269/1	2.00	20000.00	53.00	214483.58	0.00	2,34,483.58
280/1A	1.00	10000.00	33.00	133546.38	0.00	1,43,546.38
280/1B	0.00	0.00	91.00	368264.26	65.00	3,68,329.26
280/1	8.00	80000.00	25.00	101171.50	5.00	1,81,176.50
						20,61,466.30

PROJECT:
PROPOSED HOTEL ON PLOT BEARING
S.NO.SUB DIV No. 266/1,267/1,1-A,268/1,3,269/1,280/1,
1-A,1-B,SITUATED AT DARGALIM VILLAGE,
PERNEM TALUKA.

CLIENT:
DELTA CORP LIMITED.

DRN BY: V.G
DRG NO: SUB-01
DATE:
ARCHITECT'S SIGNATURE

CHKD BY: B.S.
JOB NO:
SCALE:1:1000
CLIENT'S SIGNATURE

ARCHITECTS:
SOARES & ASSOCIATES
G-1, VIKAS BUILDING,
18TH JUNE ROAD,
PANJIM, GOA.
PH/FAX : 2228040 , 2430010
e-mail: soares88@gmail.com

Unstarred LAQ No. 093

Tabled by Shri. Vijay Sardesai, M.L.A.

WATER TANKERS AND BOREWELLS REGISTERED WITH THE GOVERNMENT

Annexure "B"

b) Details of Registered water tanker with Water Resources Department

Sr. No.	Name of Taluka	WRD Registration Number	Vehicle Registration Number	Name & Address of Owner	Contact Number	Capacity of Tanker in M ³
1	2	3	4	5	6	7
DIV -I						
1	Tiswadi	N/01 Dated: 07/09/2007	GA-01-T-2795	Estrocio Pedro, Caranzalem, Barchem bhatt, Ilhas, Tiswadi Goa.	9822387458	3000.00
2	Tiswadi	N/02 Dated: 07/09/2007	GA-01-T-4915	M/s. Kurtarkar Real Estates Pvt. Ltd. 522 Bldg A, Kurtarkar Jairam Complex, Panaji		3000.00
3	Tiswadi	N/03 Dated: 07/09/2007	GA-01-T-2834	Kamat Construction, PVt. Ltd. Panaji		
4	Tiswadi	N/04 Dated: 07/09/2007	GA-01-T-7196	Milroc Development Company, 501, Milroc Lar Menezes, S.V. Road, Panaji	9552080022	5000.00
5	Tiswadi	N/05 Dated: 07/09/2007	GA-01-T-7877	Corporation of the City of Panaji, Dr. Pissuelekar Road, Opp. Café Center - Panaji.		
6	Tiswadi	N/06 Dated: 07/09/2007	GA-01-T-7815	M/s. Purxotama Ramnata Quenim, Ramnath Pradas, Dr. Dada Vaidya Road Panaji.	8888856947	5000.00
7	Bardez	N/07 Dated: 07/09/2007	GA-01-Z-3885	Andrew C.I.D.C. Cordiro, Mollembhatt, Saligao.	7875237485	5000.00
8	Bardez	N/08 Dated: 07/09/2007	GA-01-Z-2885	Andrew C.I.D.C. Cordiro, Mollembhatt, Saligao.	7875237485	3000.00
9	Bardez	N/09 Dated: 07/09/2007	GA-01-Z-1098	Kudnekar Dayanand Pandurang, 645, Sonarbhat, Saligao, Bardez - Goa	9822582003	3000.00
10	Bardez	N/10 Dated: 07/09/2007	GA-01-Z-2821	Mascarenhas Leandro Estevao, H.No. 179/10A, Alto Bella Vista, Sangolda, Bardez-Goa		
11	Bardez	N/11 Dated: 07/09/2007	GA-01-V-9401	Kerkar Shrikant Shankar, H.No. 126, Naikawado Calangute		
12	Tiswadi	N/12 Dated: 04/10/2007	GA-01-T-7028	David A. Monteiro, H.No. 331, Kerant Caranzalem, Illhas - Goa.	9822153436	15000.00
13	Tiswadi	N/13 Dated: 19/10/2007	GA-01-T-3815	Dempo Mining Corp. Pvt. Ltd, Dempo House Campal, Panaji.		3000.00
14	Tiswadi	N/14 Dated: 19/10/2007	GA-01- T-1990	Estrocio Pedro, Charles Estrocio, Caranzalem, Barchem bhatt, Ilhas, Tiswadi Goa.	9822387458	3000.00
15	Tiswadi	N/15 Dated: 06/11/2008	GA-01-T-8593	Malaquias G. De, Menezes, Corlim Tiswadi Goa		
16	Tiswadi	N/16 Dated: 23/02/2009	GA-01-T-3319	Malaquias G. De, Menezes, MGM Bldg, Corlim Tiswadi		
17	Bardez	N/17 Dated: 22/03/2010	GA-03-T-7667	Govind Vithurai Naguvekar, Paitona, Salvador-do-Mundo, Bardez - Goa.		

18	Tiswadi	N/18 Dated: 22/07/2010	GA-07-T-0712	Kamat Construction PVt. Ltd, F/1 Indira Appts. C.A. Road., Panaji (The Registration is Cancelled as Tanker is Sold)		5000.00
19	Tiswadi	N/19 Dated: 16/04/2012	GA-03-T-8954	Gauns Vanita, Mukund, H. No. 25/2, Zaribhat Pilar - Goa	9822588135	5000.00
20	Tiswadi	N/20 Dated: 16/04/2012	GA-07-F-1953	Fatima Olinda Gurjao, Corte Real Santa Cruz -Ilhas Goa	8322459566	5000.00
21	Bardez	N/21 Dated: 16/04/2012	GA-03-K0808	Sadanand V. Nagvekar, H. No. 981/2, Nandawadi, Ambirna, Socorro, Bardez - Goa. Certificate cancelled as tanker is sold.	8806990808	
22	Tiswadi	N/22 Dated: 16/04/2012	GA-03-F-4778	Shaikh Mirza, H. No. 266/A, Lourdes waddo, Nr. Madhukar Bldg, Tambi, Mati, Taleigao - Goa	9822987716	5000.00
23	Tiswadi	N/23 Dated: 07/09/2007	GA-03-F-8078	Shaikh Mirza, H. No. 266/A, Lourdes waddo, Nr. Madhukar Bldg, Tambi, Mati, Taleigao - Goa	9822987716	5000.00
24	Bardez	N/24 Dated: 07/09/2007	GA-03-K-1800	Mandrekar Rohidas Vishnu, H. No. 221, Bella Vista, Sangolda, Bardez - Goa	9822154569	5000.00
25	Bardez	N/25 Dated: 07/09/2007	GA-03-T-9119	Mandrekar Rohidas Vishnu, H. No. 221, Bella Vista, Sangolda, Bardez - Goa	9822154569	3000.00
26	Bardez	N/26 Dated: 07/09/2007	GA-03-T-9939	Simepurushkar Jitendra, H. No. 641/B, Cobravaddo, Calangute, Goa.	9822149699	3000.00
27	Bardez	N/27 Dated: 07/09/2007	GA-03-9993	Simepurushkar Jitendra, H. No. 641/B, Cobravaddo, Calangute, Goa.	9822149699	
28	Bardez	N/28 Dated: 07/09/2007	GA-03-K-8844	Prapti P. Dessai, Prabhu. Wadda, Calangute, Bardez - Goa		
29	Bardez	N/29 Dated: 07/09/2007	GA-03-T-5483	D'Souza Stephen Fermino, H.No. 2/334, Naika waddo, Calangute Bardez - Goa		
30	Bardez	N/30 Dated: 07/09/2007	GA-03-K-0437	Afonso Benjamin, P.O Carona, Lanekdem Bardez - Goa	9657896087	5000.00
31	Bardez	N/31 Dated: 07/09/2007	GA-03-K-1526	Ramnath Ramesh Naik, H. No. 685/B, Penha -de-france, Betim, Bardez - Goa	9049643520	5000.00
32	Bardez	N/32 Dated: 07/09/2007	GA-03-T-9740	Ramnath Ramesh Naik, H. No. 685/B, Penha -de-france, Betim, Bardez - Goa	9049643520	5000.00
33	Bardez	N/33 Dated: 07/09/2007	GA-03-T-6915	Malik Narayan Shripad, H. No. 299, Navelim Pilerne, P.O. Reis Magos, Bardez - Goa	9822233316	5000.00
34	Bardez	N/34 Dated: 16/04/2012	GA-03-K-3874	Malik Pradip Vasant, H. No. 345, Navelim Pilerne, Reis Magos (P.O) Bardez - Goa	9822233316	
35	Bardez	N/35 Dated: 16/04/2012	GA-03- K- 8856	Joaquim Araijs, Trindade vaddo, Arpora, Bardez -Goa.		
36	Tiswadi	N/36 Dated: 17/04/2012	GA-07-F-0024	Peixoto Jose Bernardino, H. No. 101, Santissimo Vaddo, Behind St. Micheals Church, Taleigao Goa	9890161738	5000.00
37	Tiswadi	N/37 Dated: 17/04/2012	GA-01-T-8062	Peixoto Jose Bernardino, H. No. 101, Santissimo Vaddo, Behind St. Micheals Church, Taleigao Goa	9890161738	5000.00
38	Tiswadi	N/38 Dated: 17/04/2012	GA-01-T-8302	Peixoto Jose Bernardino, H. No. 101, Santismo Vaddo, Behind St. Micheals Church, Taleigao Goa	9890161738	5000.00

39	Tiswadi	N/39 Dated: 17/04/2012	GA-01-T-0662	Peixoto Jose Bernardino, H. No. 101,Santissimo Vaddo, Behind St. Micheals Church, Taleigao Goa	9890161738	5000.00
40	Tiswadi	N/40 Dated: 17/04/2012	GA-01-T-9161	Peixoto Jose Bernardino, H. No. 101,Santissimo Vaddo, Behind St. Micheals Church, Taleigao Goa	9890161738	5000.00
41	Sattari	N/41 Dated: 19/04/2012	GA-04-T-2645	Infrastructure Logistics Pvt. Ltd, Pissurlem, Valpoi Sattari Goa		5000.00
42	Tiswadi	N/42 Dated: 25/04/2012	GA-07-F-1832	Monteiro Moses Florenco, H. No. 331, Kerant Caranzalem, Ilhas - Goa	9822153436	5000.00
43	Tiswadi	N/43 Dated: 25/04/2012	GA-01-T-9659	Peixoto Bosco Amorim, H. No. 101, Santissimo waddo, Taleigao - Goa.	9890161738	3000.00
44	Tiswadi	N/44 Dated: 25/04/2012	GA-01-T-6451	Peixoto Bosco Amorim, H. No. 101, Santissimo waddo, Taleigao - Goa.	9890161738	3000.00
45	Bardez	N/45 Dated: 25/04/2012	GA-03-T-1908	Ralph De Souza, G-S, Monalisa Naikawado, Calangute Bardez - Goa	9922202224	3000.00
46	Tiswadi	N/46 Dated: 25/04/2012	GA01-T-9001	Monteiro Savio Mariano, H. No. 159, Kerant Caranzalem Ilhas - Goa.	9822153436	3000.00
47	Sattari	N/47 Dated: 25/04/2012	GA-04-T-2250	Parab Shivanand Tulshidasm, Gaonkarwada Pissurlem, Sattari - Goa		6000.00
48	Bardez	N/48 Dated: 28/04/2012	GA-03-k-4449	Agarwadekar Mahanand S. H. No. 360, Titawado, Nerul, Bardez - Goa	9822123749	
49	Bardez	N/49 Dated: 28/04/2012	GA-03-K-9444	Agarwadekar Mohanand S. H. No. 360, Titawado, Nerul, Bardez - Goa	9822123749	
50	Bardez	N/50 Dated: 28/04/2012	GA-03-T-4449	Gaonkar Ganpat Krishna, Kumbharbhat, Maine, Pilerne, Bardez - Goa. (Sold to Mahanand Agarwadekar L. No. 221)	9822123749	
51	Bicholim	N/51 Dated: 28/04/2012	GA-04-T-3215	Marathe Anant Vishnu, H. No. 278, Barajan Navelim Bicholim - Goa		5000.00
52	Sattari	N/52 Dated: 28/04/2012	GA-04-T-8333	Shinde Sandeep Avinash Devlwada, Pissurlem, Sattari - Goa.		5000.00
53	Tiswadi	N/53 Dated: 09/05/2012	GA-01-T-6785	Smt. Pawar Sneha Sandeep H.No. 931/02, Gaunchem Bhat Mercedes, Tiswadi Goa.	9881664285	5000.00
54	Pernem	N/54 Dated: 09/05/2012	GA-04-T-4405	Kaloji Prasad Namedev, H. No. 270, Chonwaddo Dharwal Pernem - Goa	7744846666	
55	Pernem	N/55 Dated: 09/05/2012	GA-03-T-9744	Kaloji Prasad Namedev, H. No. 270, Chonwaddo Dharwal Pernem - Goa	8390419377	
56	Bardez	N/56 Dated: 09/05/2012	GA-03-K-6633	Jai Bhuvan Builders Pvt. Ltd. SM/101, Nova Cidade Complex, Alto Porvorim, Bardez - Goa	9421194282	5000.00
57	Bardez	N/57 Dated: 09/05/2012	GA-03-T-9357	Abhaya S. Chodankar, H. No. 1688, Anjuna Badem, Bardez - Goa	8775606100	
58	Tiswadi	N/58 Dated: 09/05/2012	GA-07-F-1839	Kankolkar Nilesh Laxman, H. No. 166, Carambolim, Peter, Tiswadi - Goa	9823051037	

59	Tiswadi	N/59 Dated: 14/05/2012	GA-01-F-9922	Minescape Minerals Pvt. Ltd, MG. Road, Panaji - Goa.		
60	Tiswadi	N/60 Dated: 14/05/2012	GA-01-F-7722	Minescape Minerals Pvt. Ltd, MG. Road, Panaji - Goa.		
61	Tiswadi	N/61 Dated: 14/05/2012	GA-01-F-8822	Minescape & Kadar Ores Pvt. Ltd. M. G. Road, Panaji - Goa		
62	Tiswadi	N/62 Dated: 14/05/2012	GA-01-T-8428	Minescape & Kadar Ores Pvt. Ltd. M. G. Road, Panaji - Goa		
63	Tiswadi	N/63 Dated: 14/05/2012	GA-01-F-7822	Minescape Minerals Pvt. Ltd. M. G. Road, Panaji - Goa		
64	Tiswadi	N/64 Dated: 14/05/2012	GA-05-T-0278	Minescape Earth Movers Pvt. Ltd. M. G. Road, Panaji - Goa		
65	Tiswadi	N/65 Dated: 14/05/2012	GA-01-F-7622	Minescape minerals Pvt. Ltd. M. G. Road, Panaji - Goa		
66	Tiswadi	N/66 Dated: 14/05/2012	GA-01-F-9322	Minescape minerals Pvt. Ltd. M. G. Road, Panaji - Goa		
67	Tiswadi	N/67 Dated: 29/05/2012	GA-07-F-1474	Naik Umesh Raghuvir , H. No. Old No. 212 & New No. F-5, Nr. Govt. Agriculture Farm, Ela, Old - Goa	9970444713	4000.00
68	Tiswadi	N/68 Dated: 29/05/2012	GA-07-F-0504	Naik Umesh Raghuvir , H. No. Old No. 212 & New No. F-5, Nr. Govt. Agriculture Farm, Ela, Old - Goa	9970444713	6000.00
69	Pernem	N/69 Dated: 29/05/2012	GA-03-K-8846	Dashrath G. Shirodkar, H. No. 507, Chichola, Dhargal, Pernem - Goa	9764540741	
70	Bardez	N/70 Dated: 30/05/2012	GA-03-K-3722	Sweety Water Services, H. No. 34, Paithan Salvador - De - Mundo, Porvorim Bardez Goa.		
71	Sattari	N/71 Dated: 30/05/2012	GA-04-T-1056	Mr. Parab Vasudev Ramnath, H. No. 50, Deulawada, Pissurlem, Sattari - Goa		
72	Bardez	N/72 Dated: 30/05/2012	GA-03-K-4180	Prestige Builders, Shop No. 1, Comunidade Ghar, Mapusa, Bardez - Goa		6000.00
73	Bardez	N/73 Dated: 21/06/2012	GA-03-T-6554	Vaigankar Pratima, H. No. 451, Kaiks Nagar, Assonora, Bardez - Goa		
74	Bardez	N/74 Dated: 22/06/2012	GA-03-T-9357	Abhaya S. Chodankar, H. No. 1688, Anjuna Badem, Bardez - Goa	8775606100	3000.00
75	Bardez	N/75 Dated: 29/06/2012	GA-03-K-0945	Yogita R. Halankar, Aldona, Bardez Goa.	9011647411	
76	Pernem	N/76 Dated: 29/06/2012	GA-03-K-0332	M/s. Shirodkar Enterprises Proprietor Seema Amol Shirodkar, H. No. 701, Don Khamb Dhargal - Goa.		3000.00
77	Bardez	N/77 Dated: 19/07/2012	GA-03-K-2001	Mr. Harmalkar, Sajjan Digamber, H. No. 56/B/3, Mapusa Bardez Goa	9860621301	
78	Tiswadi	N/78 Dated: 12/09/2012	GA-07-F-2670	Sushila Killedar Mahadev, Srikrishna Waters, 14A/S-2, Navelkar Estate Bainguinim, Old Goa.	9822127314	5000.00
79	Tiswadi	N/79 Dated: 12/09/2012	GA-05-T--7217	Leena Prabhu, C/o. Shrikrishna Waters, 14A/S-2, Navelkar Estate, Bainguinim, Old Goa.	8975075174	5000.00
80	Tiswadi	N/80/2012	GA-01-T-7217	Leena Prabhu C/o. Shrikrishna Waters, 14A/S-2, Navelkar Estate, Bainguinim, Old Goa.	8975075174	5000.00
81	Sattari	N/81 Dated: 12/11/2012	GA-02-T-7199	Shri Wadkar Govind Sagun, H. No. 58, Deulwada, Pissurlem, Sattari Goa.		5000.00

82	Sattari	N/82 Dated: 12/11/2012	GDS- 6879	Shri Wadkar Sagun S, H. No. 58 , Deulwada, Pissurlem, Sattari Goa.		5000.00
83	Sattari	N/83 Dated: 12/11/2012	GA-01-U-1206	Wadkar Sawaswati S, H. No. 58, Deulwada, Pissurlem Sattari Goa		5000.00
84	Sattari	N/84 Dated: 12/11/2012	GA-02-T-8278	Wadkar Sania, H. No. 58, Deulwada, Pissurlem, Sattari Goa.		5000.00
85	Sattari	N/85 Dated: 12/11/2012	GDS-7404	Shri Wadkar Sagun Sitaram, H. No. 58, Deulwada, Pissurlem Sattari Goa.		5000.00
86	Tiswadi	N/86 Dated: 20/11/2012	GA-01-T-4371	Monteiro Moses Florencio, Opp Alfred Apartment, Kerant, Caranzalem	9822153436	5000.00
87	Tiswadi	N/87 Dated: 20/11/2012	GA-01-T-2834	Monteiro Moses Florencio, Opp Alfred Apartment, Kerant, Caranzalem	9822153436	5000.00
88	Tiswadi	N/88 Dated: 20/11/2012	GA-07-F-0108	Monteiro Sebastian C, Opp, Alfred Aparmtnet, Kerant, Caranzalem Ilhas Goa. (Cancelled)	9822153436	5000.00
89	Tiswadi	N/89 Dated: 15/11/2012	GA-07-F-0594	Shri Kundaikar Shubhada Laxmikant, Flat No. 3, Carl Cnetre, Near Police Station , Old Goa.		5000.00
90	Tiswadi	N/90 Dated: 02/01/2013	GA-02-U-9792	Shri Tamba Vassudev, 9,10, Sushila Bldg, Post box 191, 18th June Road, Panaji	9823981233	5000.00
91	Tiswadi	N/91 Dated: 21/01/2013	GA-01-T-8832	Shri Rodrigues Rui, H. No. 212/3, Mollar, Corlim, Tiswadi Taluka- Goa	9822126142	5000.00
92	Tiswadi	N/92 Dated: 31/01/2013	GA-01-T-3695	Shri Gomes Nobert, H. No. 216, Ekka waddo, Carambolim, Ilhas Goa.	9158580339	5000.00
93	Tiswadi	N/93 Dated: 25/02/2013	GA-02-U-9336	Smt Gomes Milagrina, H. No. 227, Malabhat, Vaddy, Mercas Ilhas Goa.	8308825326	5000.00
94	Bardez	N/94 Dated: 29/06/2013	GA-01-X-0409	Kadamba Transport Corporation Ltd, Pareriso De Goa, Alto Porvorim, Bardez - Goa		5000.00
95	Tiswadi	N/95 Dated: 15/07/2013	GA-01-T-T-4241	Shri. Bhomkar Suresh Vinu, H. No. C-16/487, Lalugao, Porsembhat, Panaji - Goa	9822381830	3000.00
96	Tiswadi	N/96 Dated: 15/07/2013	GA-01-T-4059	Shri. Bhomkar Suresh Vinu, H. No. C-16/487, Lalugao, Porsembhat, Panaji - Goa	9822381830	3000.00
97	Sattari	N/97 Dated: 17/07/2013	GA-01-V-5266	Shri. Siddesh Ganpat Savaikar, Post Advoi Vantem, Sattari - Goa		5000.00
98	Sattari	N/98 Dated :23/07/2013	GA-02-V-6248	Shri. Sawaikar Suvarna Ganapat, Advoi, Vante, Sattari - Goa		5000.00
99	Sattari	N/99 Dated: 23/07/2013	GA-02-V-6252	Shri. Sawaikar Suvarna Ganapat, Advoi, Vante, Sattari - Goa		5000.00
100	Sattari	N/100 Dated: 23/07/2013	GA-01-U-2552	Shri. Sawaikar Ganapat Raghunath, Advoi Vante, Sattari - Goa		5000.00
101	Sattari	N/101 Dated: 23/07/2013	GDS-7927	Shri. Sawaikar Ganapat Raghunath, Advoi Vante, Sattari - Goa		5000.00

102	Tiswadi	N/102 Dated: 23/07/2013	GDS-7799	Shri. Shaikh Mirza Abudakar, H. No. 266-A, Lourdes waddo, Taleigao - Goa	9822987716	3000.00
103	Tiswadi	N/103 Dated: 23/07/2013	GDZ-8078	Shri. Shaikh Mirza Abudakar, H. No. 266-A, Lourdes waddo, Taleigao - Goa	9822987716	3000.00
104	Tiswadi	N/104 Dated: 23/07/2013	GA-07-F-7478	Shri. Shaikh Mirza Abudakar, H. No. 266-A, Lourdes waddo, Taleigao - Goa	9822987716	5000.00
105	Tiswadi	N/105 Dated: 16/08/2013	GA-07-F-3521	Shri. D'Souza Estevan, La Citadel Colony, Dona Paula - Goa	9822386561	5000.00
106	Tiswadi	N/106 Dated: 16/08/2013	GA-07--3757	Shri. Nazareth Borges. H. No. 185, Gudiwada, Neura, Ilhas - Goa	9881780646	5000.00
107	Tiswadi	N/107 Dated: 16/08/2013	GA-01-T-9388	Goa Industrial Development Corporation, Plot No. 13 A-2, EDC Complex, Patto plza, Panaji - Goa	9822071453	5000.00
108	Sattari	N/108 Dated: 30/08/2013	GDS-2995	Shri. Sawaikar Siddhesh Ganpat, Post Advoi, Vante, Sattari - Goa		5000.00
109	Sattari	N/109 Dated: 30/08/2013	GA-01-U-9295	Shri. Sawaikar Siddhesh Ganpat, Post Advoi, Vante, Sattari - Goa		5000.00
110	Sattari	N/110 Dated: 30/08/2013	GA-01-U-5758	Shri. Sawaikar Siddhesh Ganpat, Post Advoi, Vante, Sattari - Goa		5000.00
111	Sattari	N/111 Dated: 30/08/2013	GA-01-U-1105	Shri. Sawaikar Siddhesh Ganpat, Post Advoi, Vante, Sattari - Goa		5000.00
112		N/112 Dated: 07/10/2013	GA-01-U-4567	Shri. Prabhugaonkar Trivikram Govind		5000.00
113	Tiswadi	N/113 Dated: 11/10/2013	GA-07-F-1963	Goa Tourism Development Corporatuion Ltd, Trionara Apts, Near Municipal market, Panaji - Goa	9075888577	5000.00
114	Tiswadi	N/114 Dated: 14/10/2013	GA-02-V-6521	Smt. Gurjao Fatima Olinda, Corte Real, Santa Cruz, Ilhas - Goa	8322459566	5000.00
115	Bardez	N/115 Dated: 24/10/2013	GA-03-K-2904	Shri. Naik Deepa Devanand Proprietor of Hotel Dev Deep, H. No. 502, Near water tank, Porvorim, Bardez - Goa	9326110048	5000.00
116	Tiswadi	N/116 Dated: 12/11/2013	GDS-7492	Shri. David Nilesh Roland, CR-3, Adarsh Colony, Caranzalem, Ilhas - Goa	9890915855	5000.00
117	Bicholim	N/117 Dated: 13/11/2013	GA-02-T-5878	Shri. Swain Basudev, C/o Jijo John Tyre Service Navelim, Sanquelim - Goa		5000.00
118	Sattari	N/118 Dated: 20/11/2013	GA-04-T-2837	Smt. Madkar Shushanti Suresh, H. No. 212, Honda Tisk, Honda, Sattari - Goa		5000.00
119	Sattari	N/119 Dated: 20/11/2013	GA-01-U-2954	Shri. Madkar Suresh Babu, H. No. 212,, Honda Tisk, Honda, Sattari - Goa		5000.00
120	Tiswadi	N/120 Dated: 26/11/2013	GA-07-F-2464	Shri. Naik Gaurav Krishna, H. No. 396, Near Sewage Plant, Kamat Estate Tonca, Caranzalem - Goa	8888662112	5000.00
121	Tiswadi	N/121 Dated: 28/11/2013	GA-07-F-0132	Shri. Shaikh Dastageer Ali, Surya Kiran Residency, Block No. A2, Flat No. 208, 2nd Floor, Deolwaddo, Vodlem Bhat, St. Cruz, Goa	9066663636	5000.00

122	Tiswadi	N/122 Dated: 28/11/2013	GA-01-T-9836	Shri. Shaikh Dastageer Ali, Surya Kiran Residency, Block No. A2, Flat No. 208, 2nd Floor, Deolwaddo, Vodlem Bhat, St. Cruz, Goa	9066663636	5000.00
123	Pernem	N/123 Dated: 12/12/2013	GA-03-T-5511	Shri. Fernandes Benjamin Gabriel, H. No. 132, Madhla Maj, Mandrem, Pernem - Goa	9422895291	5000.00
124	Pernem	N/124 Dated: 12/12/2013	GA-02-Z-6645	Shri. Fernandes Benjamin Gabriel, H. No. 132, Madhla Maj, Mandrem, Pernem - Goa	9422895291	3000.00
125	Bicholim	N/125 Dated: 02/01/2014	GDS-7851	Shri. Prasad Laxman, C/o Jijo John Tyre Service Navelim, Sanquelim - Goa		5000.00
126	Tiswadi	N/126 Dated: 03/01/2014	GA-01-T-7948	Shri. Fernandes John Piedade, E 211, Souto Maior Road, Bazar waddo, Caranzalem, Ilhas - Goa	9370538207	5000.00
127	Tiswadi	N/127 Dated: 03/01/2014	GA-07-F-0831	Shri. Fernandes John Piedade, E 211, Souto Maior Road, Bazar waddo, Caranzalem, Ilhas - Goa	9822144289	5000.00
128	Tiswadi	N/128 Dated: 03/01/2014	GA-01-T-6614	Shri. Fernandes John Piedade, E 211, Souto Maior Road, Bazar waddo, Caranzalem, Ilhas - Goa	9822144289	3000.00
129	Tiswadi	N/129 Dated: 03/01/2014	GA-01-T-8982	Shri. Fernandes John Piedade, E 211, Souto Maior Road, Bazar waddo, Caranzalem, Ilhas - Goa	9822144289	3000.00
130	Tiswadi	N/130 Dated: 03/01/2014	GA-01-T-2547	Shri. Naik Umesh Raghuvir, H. No. E5, Ela, Near Government Agriculture Farm, Old - Goa	9970444713	5000.00
131	Salcete	N/131 Dated: 09/01/2014	GA-08-T-5428	Shri. Quadros Abilio, Minguel Miranda Road, Margao - Goa		3000.00
132	Pernem	N/132 Dated: 09/01/2014	GA-01-T-3528	Shri. Painaik Dashrath Govind, H. No. 148 A, Analem, Poraskade, Pernem - Goa		3000.00
133	Bardez	N/133 Dated: 20/01/2014	GA-03-K-1338	Shri. Naik Anil Shrikant, H. No. 433, Soccol vaddo, Assagao, Bardez - Goa	9011063985	5000.00
134	Bardez	N/134 Dated: 20/01/2014	GA-02-Z-6362	Shri. Naik Anil Shrikant, H. No. 433, Soccol vaddo, Assagao, Bardez - Goa	9011063985	3000.00
135	Tiswadi	N/135 Dated: 27/01/2013	GA-01-T-2901	Shri. Mayenkar Manoj Shantaram, H. No. 36, GPS, Chincholim, Bhatlem, Panaji - Goa		3000.00
136	Tiswadi	N/136 Dated : 27/01/2014	GA-04-T-9700	Shri Mayenkar Suryakant Shantaram, H. No. 144, Bhatlem, panaji Goa.		3000.00
137	Tiswadi	N/137 Dated :27/01/2014	GA-01-T-3831	Shri Mayenkar Suryakant Shantaram, H. No. 124, Chincholem, Batlem, Near Datta Mandir, Panaji.		3000.00
138	Bicholim	N/138 Dated:27/01/2014	GA-04-T-2556	M/s Sesa Resources Ltd, Surla Sonshi Mines, P.O Surla, sanquelim Goa.		5000.00
139	Bicholim	N/139 Dated : 27/01/2014	GA-01-T-6797	M/s Sesa Resources Ltd, Surla Sonshi Mines, P.O Surla, sanquelim Goa.		5000.00
140	Bardez	N/140 Dated:31/01/2014	GA-03-T-7055	Shri Chaturdevi Vijay, Production Manager of Neelam Hotels Pvt Ltd, Naika wado, Calangute, Bardez Ga.		5000.00
141	Bardez	N/141 Dated: 05/02/2014	GA-03-K-0511	Shri Gad Lishant Ganpat, H. No. G/181, near Hotel Priti International, Gaunsawada,Mapusa, Bardez Goa.	9657256256	5000.00

142	Sattari	N/142 Dated: 11/02/2014	GA-01-U-1501	Shri Savaikar Siddhesh Ganpat, Advoi Vantem, Sattari Goa.		5000.00
143	Bardez	N/143 Dated 12/02/2014	GA-03-K-9678	Shri Kankolkar Nityanand Ramchandra, H. No. 105, ward No. IV, behind Varundavan Hospital, Peddem Mapusa - Goa.	9822161898	5000.00
144	Bicholim	N/144 Dated: 21/02/2014	GA-04-T-3998	Shri Vishwasrao Desai Anand Savitri Vinayak, H. No. 1853, Langao, Bicholim- Goa.		5000.00
145	Tiswadi	N/145 Dated: 24/02/2014	GA-01-T-3483	Goa Industrial Development Corporation, Plot No. 13 A-2, EDC Complex, Patto plaza, Panaji - Goa	9822071453	5000.00
146	Sattari	N/146 Dated: 25/02/2014	GA-04-T-2686	Shri Desai Suresh Venktesh, H. No. 95, Advoi, Sattari Goa.		5000.00
147	Tiswadi	N/147 Dated: 03/03/2014	GA-07-F-2436	Shri Shaikh Dastgeer Ali, Suryakant Residency, Block No. A2, Flat No. 208, 2nd Floor, Deolwaddo, Vodlem Bhat, St. Cruz, Tiswadi - Goa	9066663636	5000.00
148	Tiswadi	N/148 Dated:03/03/2014	GA-07-F-6336	Shri Shaikh Dastgeer Ali, Suryakant Residency, Block No. A2, Flat No. 208, 2nd Floor, Deolwaddo, Vodlem Bhat, St. Cruz, Tiswadi - Goa	9066663636	5000.00
149	Tiswadi	N/149 Dated: 04/03/2014	GA-07-F-1627	Shri Rodrigues Carlos, H. No. 696, Marival, Dona Paula, Tiswadi Goa.	9822181763	5000.00
150	Tiswadi	N/150 Dated: 24/03/2014	GA-07-F-3219	Shri Kankonkar Nilesh Laxman, H. No. 166, Carambolim Pether, Tiswadi Goa.		5000.00
151	Bicholim	N/151 Dated: 25/03/2014	GA-01-U-2161	Shri Salunke Siddesh Devidas, H. No. 2128, Desai Nagar, Sankali, Bicholim Goa.		5000.00
152	Tiswadi	N/152 Dated : 28/03/2014	GA-07-F-4241	Shri Bhomkar Suresh Vinu, h. No. C-16/487, Taleigao, Porxem Bhat, Panaji- Goa.	9657256256	3000.00
153	Ponda	N/153 Dated:16/04/2014	GA-01-W-9214	Shri Ramanand Sadanand Shet, H. No. 468, Kaswada, Talaulim, Ponda Goa.		5000.00
154	Bicholim	N/154 Dated: 25/04/2014	GA-01-U-0358	Shri Shiroadkar Suryakant Shyamsundar, h. No. 68, Tarwada, Surla, Sanquelim Goa.		5000.00
155	Tiswadi	N/155 Dated: 30/04/2014	GA-03-T-3809	Smt Fondvekar Muktamala Vinod, h. No. 176 Smil Colony, Opp Ribandar, Police Out Post, ondvem Ribandar Goa.	8669321567	5000.00
156	Tiswadi	N/156 Dated: 06/05/2014	GA-02-Z-6128	Shri Deshpande Sunil Virupax, 17/264/A, Santismowaddo, Taleigao, Tiswadi Goa 403002.	9822384112	5000.00
157	Tiswadi	N/157 Dated: 12/05/2014	GA-07-F-0130	M/s Sesa Mining Corporation ltd, Sesa Ghor, 20- EDC complex patto Panaji- Goa.	9823455926	5000.00
158	Tiswadi	N/158 Dated: 12/05/2014	GA-07-F-1884	M/s Sesa Mining Corporation ltd, Sesa Ghor, 20- EDC complex patto Panaji- Goa.	9823455926	5000.00
159	Bardez	N/159 Dated: 19/05/2014	GA-01-Z-0161	Shri Afonso Caitano Cajetan, H. No. 336/1, Morrod, sangolda, Bardez Goa.	7758989815	5000.00

160	Tiswadi	N/160 Dated: 23/05/2014	GDS-7602	Shri Khan Anwar, Near T.B. Hospital, Taleigao, Ilhas Goa.	9822155558	3000.00
161	Tiswadi	N/161 Dated: 23/05/2014	GA-01-T-7868	Shri Khan Anwar, Near T.B. Hospital, Taleigao, Ilhas Goa.	9822155558	3000.00
162	Bicholim	N/162 Dated: 26/05/2014	GA-01-T-3205	Shri Swain Basudev, C/o, Jijo John Tyre Service, Navelim, Sanquelim- Goa.		5000.00
163	Bardez	N/163 Dated: 26/05/2014	GA-01-Z-0028	Shri Naik Vassant Ramnath, H. No. 1217, Annawaddo, Candolim, Bardez Goa.	9890210544	5000.00
164	Bardez	N/164 Dated: 27/05/2014	GA-03-K-8844	Smt Dessai Prapti Pralhad, H. No. 246/8, Prabhuwaddo, Calangute Bardez Goa.		5000.00
165	Tiswadi	N/165 Dated: 28/05/2014	GDY-4014	Shri Parvatkar Narendra Mahadev, H. No. 271 Maha Ganga, Niwas, Corlim, Malar, Tiswadi Goa.	9822166144	5000.00
166	Tiswadi	N/166 Dated: 28/05/2014	GA-07-F-1596	Shri Gomes Norbert, H. No. 216, Ekkawaddo, Carambolim, Ilhas Goa.	9822180667	5000.00
167	Tiswadi	N/167 Dated: 29/05/2014	GA-07-F-4195	Shri Bhomkar Suresh Vinu, h. No. C-16/487, Taleigao, Porxem Bhat, Panaji- Goa.	9657256256	5000.00
168	Tiswadi	N/168 Dated: 02/06/2014	GA-01-T-8302	Shri. Peixoto Jose, H. No. 101, Behind St. Michael Church, Santissimo waddo, Taleigao, Tiswadi - Goa	9850661269	5000.00
169	Bardez	N/169 Dated: 05/06/2014	GA-01-V-5669	Smt. Gurav Poonam Venkatesh, H. No. 2/1-A, Khotla, Saligao, Bardez - Goa	9822150969	5000.00
170	Bardez	N/170 Dated: 05/06/2014	GA-01-V-3105	Shri. Gurav Venkatesh Krishna, H. No. 2/1-A, Khotla, Saligao, Bardez - Goa	9822150969	5000.00
171	Tiswadi	N/171 Dated: 05/06/2014	GA-07-F-8989	Shri. Mayankar Manoj Shantaram, H. No. 136, Chincholim, Taleigao - Goa		5000.00
172	Bardez	N/172 Dated: 09/06/2014	GA-01-Z-3600	Shri. Araujo Joaquim Anthony, H. No. 131, Trindade vaddo, Arpora, Bardez - Goa	9822197488	5000.00
173	Bicholim	N/173 Dated: 13/06/2014	GA-01-U-2732	Shri. Gawas Laxmikant Vaman, H. No. 24/18, Durigwada, Navelim, Sankhali, Bicholim - Goa		5000.00
174	Bardez	N/174 Dated: 03/06/2014	GA-03-N-3841	Shri. Surajdatta Sagun Morajkar, Director of Soham Leisure Ventures Pvt. Ltd. Next to Saipem Volleyball Court, Near Saipem Sports Club, Saipem, Candolim, Bardez - Goa	9890399669	5000.00
175	Bardez	N/175 Dated: 13/06/2014	GA-03-T-4160	Shri. Parsekar Ajay Shivram, H. No. 120, Mai-de-Deus waddo, Sangolda, Bardez - Goa	9923569310	5000.00
176	Bardez	N/176 Dated: 13/06/2014	GA-03-K-0110	Shri. Parsekar Ajay Shivram, H. No. 120, Mai-de-Deus waddo, Sangolda, Bardez - Goa	9923569310	5000.00
177	Pernem	N/177 Dated: 19/06/2014	GA-03-T-4744	Shri. Kaloji Dinesh Namdev, H. No. 270, Chonwaddo, Dhargal, Pernem - Goa	7744846666	3000.00
178	Pernem	N/178 Dated: 19/06/2014	GA-01-Z-4403	Shri. Kaloji Dinesh Namdev, H. No. 270, Chonwaddo, Dhargal, Pernem - Goa	7744846666	3000.00

179	Pernem	N/179 Dated: 19/06/2014	GA-01-V-8003	Shri. Kaloji Namdev Sitaram, H. No. 270, Chonwaddo, Dhargal, Pernem - Goa	8390419377	3000.00
180	Tiswadi	N/180 Dated: 23/06/2014	GA-07-F-9636	Shri. Shaikh Dastageer Ali, Suryakant Residency, Block No. A2, Flat No. 208, 2nd Floor, Deolwaddo, Vodlem Bhat, St. Cruz, Tiswadi - Goa	9066663636	5000.00
181	Bardez	N/181 Dated: 23/06/2014	GA-03-T-9444	Shri. Govekar Krishna Mohan, H. No. 481/C, Socorro, Porvorim, Bardez - Goa	9049936023	3000.00
182	Tiswadi	N/182 Dated: 24/06/2014	GA-01-T-3002	Shri. Rodrigues Rui Leoncio, H. no. 212/3, Mollar, Corlim, Tiswadi - Goa	9822126142	3000.00
183	Bardez	N/183 Dated: 24/06/2014	GA-01-T-6567	Shri. Govekar Krishna Mohan, H. No. 481/C, Socorro, Porvorim, Bardez - Goa	9049936023	5000.00
184	Bardez	N/184 Dated: 24/06/2014	GA-02-V-7669	Shri. Gad Lishant Ganpat, H. No. G/181, near Hotel Priti International Gaunsawaddo, Mapusa-Goa	9657256256	5000.00
185	Bardez	N/185 Dated: 24/06/2014	GA-01-T-2555	Shri. Gad Lishant Ganpat, H. No. G/181, near Hotel Priti International Gaunsawaddo, Mapusa-Goa	9657256256	5000.00
186	Bardez	N/186 Dated: 24/06/2014	GA-03-N-2249	Shri. Gad Lishant Ganpat, H. No. G/181, near Hotel Priti International Gaunsawaddo, Mapusa-Goa	9657256256	5000.00
187	Bardez	N/187 Dated: 24/06/2014	GA-03-N-2059	Shri. Gad Lishant Ganpat, H. No. G/181, near Hotel Priti International Gaunsawaddo, Mapusa-Goa	9657256256	5000.00
188	Tiswadi	N/188 Dated: 24/06/2014	GDS-7051	Shri. Khaunte Gaurav Prakash, Director Alcon Real Estate Pvt. Ltd. Velho Felho Bldg, Panaji-Goa	9850357235	5000.00
189	Bardez	N/189 Dated:27/06/2014	GA-03- K-0663	Shri Mapsekar Nilesh Madhu, H. No. 226, Prabhu waddo, Calangute, Bardez Goa.	9822136733	5000.00
190	Tiswadi	N/190 Dated: 27/06/2014	GA-07-F-0570	Goa Tourism Development Corporation Ltd Trionora Apts, Near Muncipal Market, Panaji- Goa.	7774906351	500.00
191	Pernem	N/191 Dated: 02/07/2014	GA-11-T-0199	Shri Rodrigues Avelino Antonio, H. No. 278, Chonwada, Dhargal, Pernem Goa.	9764682878	5000.00
192	Bardez	N/192 Dated:03/07/2014	GA-03-N-3773	Shri Afonso Benjamin, H. No. 1097/1, Carona, Bardez Goa.	9657896087	5000.00
193	Bardez	N/193 Dated: 04/07/2014	GA-01-Z-0876	Smt Kiledar Habibabi, H. No. 502, Dilima waddo, Aradi Socorro, Porvorim, bardez Goa.		5000.00
194	Bardez	N/194 Dated : 09/07/2014	GA-03-T-7095	Shri Naik Prathmesh Udai, H. No. 440/2, Soccolwaddo, Assagao, Bardez Goa.	9403270888	
195	Bardez	N/195 Dated:09/07/2014	GA-01-Z-2099	Shri Karuppa Bagkiya Durai, H. No. 1703, Alto Betim, Bardez Goa	8806807389	5000.00
196	Sattari	N/196 Dated: 11/07/2014	GA-04-T-3895	Shri Savaikar Suvarna Ganpat, Post Advoi Vantem, Sattari Goa.		5000.00
197	Sattari	N/197 Dated: 11/07/2014	GA-01-U-5252	Shri Sawaikar Ganpat raghunath, Post Advoi Vante, Sattari Goa.		5000.00
198	Bardez	N/198 Dated:14/07/2014	GA-03-K-9353	Shri Mapsekar Nilesh Madhu, Prabhu Waddo, Calangute, Bardez Goa	9822136733	5000.00

199	Tiswadi	N/199 Dated: 16/07/2014	GA-07-F-2636	Shri Shaikh Datageer Ali, Suryakiran Residency Block No. 42, Flat No. 208, 2nd Floor, Deulwaddo, Vodlem Bhat, St. Cruz Goa.	9066663636	5000.00
200	Bicholim	N/200 Dated: 18/07/2014	GA-04-T-1376	Shri Mambly Ranjit Velayudhan, H. No. 1165/A., Housing Board Colony, Sanquelim, Bicholim Goa.		5000.00
201	Bicholim	N/201 Dated: 18/07/2014	GA-04-T-1980	Shi Mambully Ranjit Velayudhan, H. No. 1165/A, Housing Board Colony, Sanquelim, Bicholim Goa.		5000.00
202	Bardez	N/202 Dated: 21/07/2014	GA-01-Z-3804	Shri Kudnekar Anil Pandurang, H. No. 6/93-C, Sonarbhat, Saligao, Bardez Goa.	9822586125	5000.00
203	Pernem	N/203 Dated: 21/07/2014	GA-01-Z-3528	Dashrath Pai Naik, H. No. 148/A, Analem Near Satorda, N.H. Bridge, Poraskade, Pernem Goa.		3000.00
204	Bardez	N/204 Dated: 22/07/2014	GA-03-K-9827	Smt. Soares Carmelina Esparanca, H. No. 435, Marra Pilerne, Bardez Goa.	7350926714	5000.00
205	Bardez	N/205 Dated: 22/07/2014	GA-03-N-0882	Shri Fernandes Anthony Joseph, H. No. 764, Camna waddo, Tivim, Bardez Goa.	7350926718	5000.00
206	Bardez	N/206 Dated: 25/07/2014	GA-03-N-1771	Kalangutkar Reshma Dilip, H.No.301/4, Livrament waddo, P.O. Saligao, Sangolda, Bardez - Goa	8669321567	5000.00
207	Bardez	N/207 Dated: 25/07/2014	GA-03-K-0988	Kalangutkar Dhiraj Dilip, H.No.301/4, Livrament waddo, P.O. Saligao, Sangolda, Bardez - Goa	9326135405	5000.00
208	Bardez	N/208 Dated: 25/07/2014	GA-03-T-6935	Kalangutkar Reshma Dilip, H. No. 301/4, Livrament waddo, P.O. Saligao, Sangolda, Bardez - Goa	9326135405	5000.00
209	Tiswadi	N/209 Dated: 28/07/2014	GA-07-F-4325	Smt. Bhomkar Suchitra Suresh, H. No. C-16/487, Taleigao, Panaji - Goa	9657256256	5000.00
210	Bardez	N/210 Dated: 31/07/2014	GA-01-Z-1797	Shri. Kudnekar Sunil Pandurang, H. No. 645, Sonarbhat, Saligao, Bardez - Goa		5000.00
211	Bardez	N/211 Dated: 13/08/2014	GA-03-N-3917	M/s M. Venkata Rao Infra Projects Pvt. Ltd., 818, 2nd Floor, Above Audi Showroom, Opp. O'Coqueiro Porvorim, Bardez - Goa	9850477882	5000.00
212	Bardez	N/212 Dated: 21/08/2014	GA-01-V-1827	Shri. Korgaonkar Sandeep Dasharath, Tivai waddo, Calangute, Bardez - Goa	9822687183	5000.00
213	Bardez	N/213 Dated: 22/08/2014	GA-01-V-4949	Shri. Agarwadekar Sadanand Surya, H. No. 389, Titawado, Nerul, Bardez - Goa	9767244799	5000.00
214	Bardez	N/214 Dated: 25/08/2014	GA-03-K-2469	Shri. Bharat D. Harmalkar, 214, Xelpem, Duler, Mapusa, Bardez - Goa	9767244799	3000.00
215	Bardez	N/215 Dated: 25/08/2014	GA -01- T-8118	Shri. Hiroji Sandeep Dasharath, Tivai waddo, Calangute, Bardez - Goa		5000.00
216	Bardez	N/216 Dated: 25/08/2014	GA -01- T-5121	Shri. Hiroji Sandeep Dasharath, Tivai waddo, Calangute, Bardez - Goa		5000.00
217	Bardez	N/217 Dated: 26/08/2014	GA-03-N-1654	Shri. Naik Jaganath Atchut, H. No. 309, Shetye waddo, Duler, Mapusa, Bardez - Goa		5000.00

218	Bicholim	N/218 Dated: 27/08/2014	GA-01-T-2184	Shri. Hadfadkar Santosh Prabhakar, H. No. 2191, Shantaram Nagar, Bordem, Bicholim - Goa		5000.00
219	Tiswadi	N/219 Dated: 01/09/2014	GA-07-F-1883	M/s Sesa Mining Corporation Ltd. Sesa Ghor, 20 EDC Complex, Patto, Panaji - Goa	9823455926	5000.00
220	Bardez	N/220 Dated: 11/09/2014	GA-01-V-1778	Shri. Simepuruskar Jitendra Jaidev, H. No. 6/41, Khobra waddo, Calangute, Bardez - Goa		3000.00
221	Bardez	N/221 Dated: 11/09/2014	GA-03-T-4449	Shri. Mahanand S. Agarwadekar, H. No. 360, Tita waddo, Nerul, Bardze - Goa	9822123749	5000.00
222	Bardez	N/222 Dated: 12/09/2014	GA-01-U-3119	Shri. Naik Sanjay Bharat, Soccol waddo, Assagao, Bardez - Goa		3000.00
223	Bardez	N/223DATED:12/09/2014	GA-01-V-0822	Shri Vijay S. Agarwadekar, H. No. 360, ita waddo, Nerul, Bardez Goa.	9822123749	5000.00
224	Bardez	N/224DATED:12/09/2014	GA-02-V-9099	Shri Agarwadekar Vijay S., H. No. 360, Tita waddo, Bardez Goa.	9822123749	5000.00
225	Bardez	N/225DATED:12/09/2014	GA-01-V-0406	Shri Suryakant J. Agarwadekar, H. No. 360, Titawaddo, Nerul, Bardez Goa.	9822123749	5000.00
226	Bardez	N/226DATED:12/09/2014	GA-02-V- 6096	Shri Agarwadekar Vijay S. ,H . No. 360, Titawaddo, Nerul, Bardez Goa.	9822123749	5000.00
227	Bardez	N/227DATED:15/09/2014	GA-03-K-1242	Shri Korgaonkar Santosh Sadguru, H. No. 142 (A) 1/4, Opposite Tivim Industrial Estate, Acoi, Mapusa Goa.		5000.00
228	Bardez	N/228DATED:15/09/2014	GA-01-Z-1637	Shri Korgaonkar Santosh Sadguru, H. No. 142 (A) 1/4, Opposite Tivim Industrial Estate, Acoi, Mapusa Goa.		5000.00
229	Bardez	N/229DATED:15/09/2014	GA-03-T-1244	Shri Naik Vishal Vinayak, H. No. 433, Socalwaddo, Assagao, Bardez Goa.		5000.00
230	Bardez	N/230DATED:15/09/2014	GA-01-T-8051	Shri Naik Vishal Vinayak, H. No. 433, Socal waddo, Assagao, Bardez Goa.		3000.00
231	Bardez	N/231DATED:17/09/2014	GA-03-N-4219	Shri Hiroji Sanjay Dashrath, H. No. 3/13-A, Tivai vaddo, Calangute, Bardez Goa.		5000.00
232	Bardez	N/232DATED:18/09/2014	GA-01-Z-1098	Shri Kudnekar Dayanand Pandurang, H. No. 6/93I, Sonarbhat, Saligao, Bardez Goa.		5000.00
233	Bardez	N/233DATED:18/09/2014	GA-03-N-4449	Shri Mahanand S. Agarwadekar, H. No. 360, Titawaddo, Nerul, Bardez Goa.	9822123749	5000.00
234	Bardez	N/234DATED:18/09/2014	GA-01-V-9444	Shri Mahanand S. Agarwadekar, H. No. 360, Titawaddo, Nerul, Bardez Goa.	9822123749	5000.00
235	Bardez	N/235 DATED:22/09/2014	GDX-0232	Kadamba Transport Corporation Ltd, Paraiso De, Alto, Porvorim, Bardez Goa.		5000.00
236	Tiswadi	N/236 DATED:22/09/2014	GA-01-T-8302	Shri Mayenkar Dinesh Shantaram, H. No. 136, Near Datta Mandir Chincholem, Tiswadi Goa.		5000.00
237	Tiswadi	N/237 DATED:22/09/2014	GA-01-T-3983	Shri Gaonkar Siddhesh Babani, H. No. 903, Halpora, Carambolim, Tiswadi Goa.		5000.00

238	Tiswadi	N/238 DATED:23/09/2014	GA-07-F-4358	Shri Fernandes John Piedade, E211, Bazar waddo, Caranzalem Ilhas, Tiswadi Goa.	9370538207	3000.00
239	Bardez	N/239 DATED:26/09/2014	GA-03-T-5004	Smt Parulekar Asha Pradeep, H. No. 5/34, Donavaddo, Saligao, Bardez Goa.		5000.00
240	Bardez	N/240 DATED:07/10/2014	GA-03-T-3917	Shri Nagvekar Nilesh Laximan, H. No. 306/1, Livramnet Vaddo, Sangolda, Bardez Goa.	7972492022	5000.00
241	Pernem	N/241 DATED:08/10/2014	GA-01-Z-2234	Smt Sarmalkar Kishori Keshav, H. No. 476/1, Deulwada, Dhargal, Pernem Goa.		5000.00
242	Tiswadi	N/242 DATED:08/10/2014	GA-07-F-4489	Smt Fondvekar Muktamala Vinod, H. No. 176/B, Smile Colony, Fondvem, Ribandar, Tiswadi Goa.		5000.00
243	Tiswadi	N243 DATED: 09/10/2014	GA-07-F-1938	Premier Builders Goa Pvt Ltd, 301, Unitech City Centre Bldg, Opp Niyaz Restaurant, Panaji- Goa.		3000.00
244	Bardez	N/244 DATED:09/10/2014	GA-03-K-4449	Shri Mahanand S. Agarwadekar, Nerul, Tita waddo, Bardez Goa.	9822123749	5000.00
245	Bicholim	N/245DATED:10/10/2014	GA-01-U-5350	Smt Volvoikar Kundan Rajan, H. No. 310, Maina, Navelim, Bicholim Goa.		5000.00
246	Tiswadi	N/246 DATED:10/10/2014	GA-07-F-6636	Shri Shaikh Dastageer Ali, F. No. A/2, 208, 2nd Floor, Suryakiran Residency, Odlem bhat, St. cruz, Tiswadi Goa.	9066663636	5000.00
247	Bicholim	N/247DATED:14/10/2014	GA-04-T-4023	Smt Vishwasrao dessai Durga Anand, H. No. 1853, Corgao, Bicholim Goa.		5000.00
248	Bardez	N/248 DATED:17/10/2014	GA-01-Z-449	Shri Mahanand S. Agarwadekar, H. No. 360, Titawaddo, Nerul, Bardez Goa.	9822123749	5000.00
249	Bardez	N/249 DATED:17/10/2014	GA-01-V-3172	Shri Mahanand S. Agarwadekar, H. No. 360, Titawaddo, Nerul, Bardez Goa.	9822123749	5000.00
250	Bardez	N/250 DATED:17/10/2014	GA-03-T-6283	Shri kalangutkar Prakash MANGUESH, h. No. 721, Dando wada, Nerul, Bardez Goa.	9822144289	5000.00
251	Bicholim	N/251DATED:31/10/2014	GA-01-V-3755	Shri Desai Amol Bhimrao, H. No. 417, Gaothan, Sankhali Goa.		5000.00
252	Sattari	N/252DATED:31/10/2014	GA-07-F-0676	M/s Sesa Goa Ltd, Sonshi Iron Ore mine, Pissurlem, Sattari Goa.		5000.00
253	Tiswadi	N/253 DATED:31/10/2014	GA-07-F-4594	Naik Sushma Hari, H. No. 217, Near Rukhmini Appts, St. Inez, Panaji Goa.	7719967011	3000.00
254	Tiswadi	N/254 DATED:31/10/2014	GA-07-F-4528	Naik Sushma Hari, H. No. 217, Near Rukhmini Appts, St. Inez, Panaji Goa.	7719967011	5000.00
255	Tiswadi	N/255 DATED	GA-07-F-4416	Naik Sushma Hari, H. No. 217, Near Rukhmini Appts, St. Inez, Panaji Goa.	7517407915	5000.00
256	Bardez	N/256 DATED:07/11/2014	GA-08-T-5495	Shri Mahanand S. Agarwadekar, H. No. 360, Titawada, Nerul, BARDEZ Goa.	9822123749	5000.00
257	Bardez	N/257 DATED:07/11/2014	GA-02-T-9331	Shri Mahanand S. Agarwadekar, H. No. 360, Titawada, Nerul, BARDEZ Goa.	9822123749	5000.00

258	Bardez	N/258 DATED:07/11/2014	GA-03-K-9444	Shri Mahanand S. Agarwadekar, H. No. 360, Titawada, Nerul, BARDEZ Goa.	9822123749	5000.00
259	Bardez	N/259 DATED:07/11/2014	GA-02-V-6247	Shri Mahanand S. Agarwadekar, H. No. 360, Titawada, Nerul, BARDEZ Goa.	9822123749	5000.00
260	Bardez	N/260 DATED:10/11/2014	GA-01-Z-1516	Shri kerkar Dactu Shantaram, H. No. 496, Mudda wadi, Saligao, BARDEZ Goa.	9822151646	5000.00
261	Bicholim	N/261DATED:11/11/2014	GA-03-K-5999	Shri Gad Narayan Rama, H. No. 35, Vanshi, Bicholim Goa.		3000.00
262	Bicholim	N/262DATED:11/11/2014	GA-04-T-8687	Shri Kanekar Saiprasad Prabhakar, Sankhali Goa.		3000.00
263	Ponda	N/263DATED:21/11/2014	GA-01-T-2834	Smt Shet Mohini Mahanand, H. No. 86/A, Durbhat, Ponda-Goa.		5000.00
264	Bicholim	N/264DATED:24/11/2014	GA-02-T-6428	Shri Narvekar Bhanudas Anant, H. N. 47, Tarmatha Surla, Bicholim- Goa.		5000.00
265	Bardez	N/265 DATED:27/11/2014	GA-01-T-7118	Sakhalkar Jayant Kashinath, H. No. 4/17-A, Tabrawaddo, Saligao, Bardez Goa.	9822142992	5000.00
266	Sattari	N/266DATED:27/11/2014	GA-01-V-2983	Shri Madkar Suresh Babu, H. No. 212/1, Honda, Tisk Sattari Goa.		5000.00
267	Bardez	N/267 DATED:05/12/2014	GA-03-N-9939	Shri Simepurushkar Jitendra Jaideo, Anjuna Bardez Goa		5000.00
268	Bardez	N/268 DATED:11/12/2014	GA-03-N-0625	Shri Naik Tuenkar Namdev Bhau, H. No. 129, MAE-DE-Deus, Sangolda, Bardez Goa.	9823559464	5000.00
269	Bardez	N/269 DATED:11/12/2014	GA-03-T-3290	Shri Naik Tuenkar Namdev Bhau, H. No. 129, MAE-DE-Deus, Sangolda, Bardez Goa.	9823559464	5000.00
270	Bardez	N/270 DATED:12/12/2014	GA-03-T-5483	Shri D'Souza Stephn Fermino, H. No. 2/334, NAIKWADDA, Calangute, Bardez Goa.	9673793207	5000.00
271	Bardez	N/271 DATED:17/12/2014	GA-03-K-5577	Shri Govekar Harshad Vishram, H. No. 1653, Deulwaddo, Anjuna, Bardez Goa.	8668700125	5000.00
272	Bardez	N/272 DATED:02/01/2015	GA-03-N-4800	Shri Parsekar Ajay Shivam, H. No. 120 Mai-de-Deus, Waddo, Sangolda, Bardez Goa.	9923569301	3000.00
273	Bardez	N/273 DATED:20/01/2015	GA-03-W-5577	Shri Govekar Harshad Vishram, (Nityay Water) H. No. 1653, Deulwadi, Anjuna, Bardez GOA.	8668700125	5000.00
274	Pernem	N/274DATED:22/01/2015	GA-01-T-9392	Goa Industrial Development Corporation, Tuem Industrial Estate, Pernem Goa.	9422441150	5000.00
275	Bardez	N/275DATED:28/01/2015	GA-01-W-8973	Shri Sawant Yoganand Suresh, H. No. 377, Munag wada, Assgao, Bardez Goa.		5000.00
276	Tiswadi	N/276DATED:28/01/2015	GA-07-F-7836	Shri Shaikh Datsageer Ali, Suryakiran Residency, Flat No. 208, 2nd Floor, St. Cruz, Tiswadi Goa.	9066663636	5000.00
277	Pernem	N/277DATED:30/01/2015	GA-11-T-0816	Shri Rodrigues Avelino Antonio, H. No. 278, Chonwada, Dhargal, Pernem Goa.		5000.00
278	Bardez	N/278DATED:03/02/2015	GA-03-N-5249	Shri Agrawadekar Vijay S, Titawaddo, Nerul, bardez Goa.	9822161996	5000.00

279	Bardez	N/279DATED:06/02/2015	GA-02-T-9136	Shri Michael Filip Dias, H. No. 288, Livrament waddo, Sangolda, Bardez Goa.		5000.00
280	Bardez	N/280DATED06/02/2015	GA-01-V-6427	Shri Menezes Clinton Rudolf, H. No. 90, Mae-De-Deus, Sangolda, Bardez Goa.		5000.00
281	Tiswadi	N/281DATED16/02/2015	GA-01-T-6596	Nikitasha Realtors Pvt Ltd, Madkaikar Apts, Ella, Old-Goa, Tiswadi Goa.		5000.00
282	Tiswadi	N/282DATED 20/02/2015	GA-07-W-4778	Shaikh Mirza, Taleigao Tiswadi Goa		5000.00
283	Bardez	N/283DATED 24/02/2015	GA-01-Z-0998	Shri Lakangutkar Prakash Manguesh, H. No. 721, Dandowada, Nerul, BARDEZ Goa.	9822144289	5000.00
284	Bardez	N/284 DATED 27/02/2015	GA-03-K-2001	Shri Badiger Pawan Shrikant, H. No. 347/5-1, Xetiawado, MAPUSA, Bardez Goa.	9527765163	5000.00
285	Pernem	N/285 DATED 11/03/2015	GA-03-K-8846	Shri Shirodkar Dashrath Ganesh, H. No. 507, Dhargal, Pernem Goa.		5000.00
286	Pernem	N/086 DATED 11/03/2015	GA-03-K-6473	Shri Fernandes Benjamin, H. No. 31, Madhlamji, Mandrem, Pernem Goa.	9422895291	3000.00
287	Bardez	N/287 DATED 12/03/2015	GA-03-K-0099	Smt. Vaigankar Pratima Pradip, H. No. 272/32, Kailas Nagar, Assonora, bardez Goa.		5000.00
288	Bardez	N/288 DATED16/03/2015	GA-01-Z-1483	Shri Kerkar Dactu Shantaram, H. No. 496, Muddawadi, Saligao, Bardez Goa.		5000.00
289	Bardez	N/289 DATED 16/03/2015	GA-03-K-0346	Shri Mascarenhas honorio Lobo, Corroscos waddo, Mapusa, Bardez Goa.		5000.00
290	Tiswadi	N/290 DATED 16/03/2015	GA-07-F-4340	Shri C.A. Ahmed, H. No. A-4, Madkaikar Plaza, Molar Corlim Tiswadi Goa.		3000.00
291	Tiswadi	N/291 DATED 16/03/2015	GA-07-F-4848	Shri Peixoto Jose Bernardino, H. No. 101, Santissimo waddo, behind St. Michael's Church Taleigao, Tiswadi Goa.	9890161738	5000.00
292	Bardez	N/292 DATED 16/03/2015	GA-03-T-7637	Shri D'Costa Francisco Edmundo, H. No. 308, Bhatti waddo, Nerul, Bardez Goa.	9822181763	5000.00
293	Bardez	N/293 DATED 16/03/2015	GA-01-Z-1764	Shri D'Costa Francisco Edmundo, H. No. 308, Bhatti waddo, Nerul, Bardez Goa.	9822181763	5000.00
294	Bardez	N/294 DATED 16/03/2015	GA-01-U-2221	Shri D'Costa Francisco Edmundo, H. No. 308, Bhatti waddo, Nerul, Bardez Goa.	9822181763	5000.00
295	Bardez	N/295 DATED 16/03/2015	GA-01-Z-2873	Shri D'Costa Francisco Edmundo, H. No. 308, Bhatti waddo, Nerul, Bardez Goa.	9822181763	5000.00
296	Bardez	N/296 DATED 16/03/2015	GA-01-Z-0559	Shri D'Costa Francisco Edmundo, H. No. 308, Bhatti waddo, Nerul, Bardez Goa.	9822181763	5000.00
297	Tiswadi	N/297 DATED 17/03/2015	GA-07-F-4870	Shri Monteiro Moses Florencio, H. No. 331, Kerant, Cranzalem, Ilhas, Tiswadi Goa.	9822153436	5000.00
298	Bardez	N/298 DATED 20/03/2015	GA-01-W-9783	Shri Sawant Kalinand Suresh, H. No. 377, Munagwada, Assagao, Bardez Goa.		5000.00

299	Pernem	N/299 DATED 25/03/2015	GA-01-Z-0858	Shri Harmalkar Subhash Arjun, H. No. 121, Shirgal, Dhargal, Pernem Goa.(Permission Cancelled as Tanker is Sold)	9764016671	5000.00
300	Bardez	N/300 DATED 27/03/2015	GA-03-N-9444	Shri Mahanand S. Agarwadekar, H. No. 360, Titawaddo, Nerul, Bardez GOA.	9822123749	5000.00
301	Bardez	N/301 DATED 07/04/2015	GA-05-T-0069	Shri Pereira Caitano Manuel, H. No. 833/A, Dandadi, Nerul, Bardez Goa.	9881347754	5000.00
302	Pernem	N/302 DATED 21/04/2015	GA-07-F-0141	Shri Mhaiskar Shriram Laxman, H. No. 64, Deulwada, Kasarvarne, Pernem Goa.	7755910896	5000.00
303	Bicholim	N/303 DATED 21/04/2015	GA-01-U-0963	Shri Gawas Shiva Tukaram, H. No. 84, Bharoniwada, Navelim, Bicholim Goa.		5000.00
304	Bardez	N/304 DATED 04/05/2015	GA-03-K-3084	Smt. Narvekar Sushmavati S., H. No. 605, Near Bar Corner, Penha-de-France (P. O.) Betim, Bardez - Goa.		3000.00
305	Bardez	N/305 DATED 04/05/2015	GA-03-N-5356	Smt. Asnodkar Siya Siraj, H. No. 65/03, Bhuktiwaddo, Socorro, Bardez - Goa.	9075037051	3000.00
306	Bardez	N/306 DATED 04/05/2015	GA-03-N-5455	Shri. Nagvekar Govind Vithuraj, H. No. 34, Paithona, Salvador-do-Mundo, Bardez - Goa.		3000.00
307	Tiswadi	N/307 DATED 11/05/2015	GA-07-T-9989	Smt. Kerkar Asmita Sandesh, Tiswadi Taluka		5000.00
308	Tiswadi	N/308 DATED 13/05/2015	GA-01-G-7614	Executive Engineer, P. W. D, W. D. III, St. Inez, Panaji - Goa		5000.00
309	Tiswadi	N/309 DATED 16/06/2015	GA-01-T-9390	Goa Industrial Development Corporation , Plot No. 13 A/2, EDC, Complex, Patto Plaza, Panaji, Tiswadi - Goa.	9822071453	5000.00
310	Tiswadi	N/310 DATED 08/07/2015	GA-01-Z-1084	Shri. Khan Nazir, H. No. 103/D, Dada Vaidhya Road, Boca da-Vaca, Panaji - Goa.	9822155558	3000.00
311	Bardez	N/311 DATED 13/07/2015	GA-03-K-1045	Smt. Fadte Madhuri Madhur, H. No. 252, Mokharai wada, Revora, Bardez - Goa.	8698285549	5000.00
312	Salcete	N/312 DATED 27/07/2015	GDZ-5299	Shri. Sawant Suresh Madhu, Uzro, Raia, Salcete - Goa. Registration cancelled as tanker met with accident and scrapped.		5000.00
313	Tiswadi	N/313 DATED 29/07/2015	GA-01-W-7571	M/s Anusuya Builders, Anusuya Niwas, H. No. 206, Ella, Old Goa, Tiswadi - Goa	9423887042	5000.00
314	Tiswadi	N/314 DATED 05/08/2015	GA-01-T-4045	Premier Builders, 301, Unitesh City Centre Bldg., Opp. Niyaz Restaurant, Panaji - Goa	9325081106	3000.00
315	Tiswadi	N/315 DATED 10/08/2015	GA-01-T-7468	Shri. Akhadkar Vivek Kamlakant, H. No. 176, Fondvem, Ribandar - Goa.	9822130175	5000.00
316	Tiswadi	N/316 DATED 24/08/2015	GA-01-W-6385	Smt. Uscoikar Anjali Ajay, H. No. 218, Near Ella Farm, Sonar Bhat, Ella-Old-Goa, Tiswadi - Goa	9823727872	5000.00
317	Tiswadi	N/317 DATED 25/08/2015	GA-07-F-4925	Smt. Bhomkar Suchitra Suresh, H. No. C-16/487, Posrem Bhat, Taleigao, Panaji - Goa.	9657256256	5000.00
318	Salcete	N/318 DATED 07/10/2015	GA-02-Z-6138	Shri. Mohammod Suleman Khan, H. No. 144, Pira waddo, Betul - Goa		5000.00

319	Bicholim	N/319 DATED 27/10/2015	GA-02-T-5318	Shri. Prasad Laxman, C/o Jijo John Tyre Service, Navelim, Sankhali - Goa		5000.00
320	Bicholim	N/320 DATED 02/11/2015	GA-01-U-1805	Smt. Gaonkar Rasika Jaga, Gaonkar wada, Surla, Bicholim Goa		5000.00
321	Ponda	N/321 DATED 12/11/2015	GA-06-T-0561	Shri Naik Sunil Gajanan, H. No. 53, Tarvalem, Shiroda Goa.		5000.00
322	Sattari	N/322 DATED 13/11/2015	GA-02-V-6250	Smt. Sawaikar Suvarna Ganpat, Vante, Sattari Goa.		5000.00
323	Sattari	N/323 DATED 13/11/2015	GA-01-U-2195	Shri Sawaikar Siddhesh Ganpat, Vante, Sattari Goa.		5000.00
324	Sattari	N/324 DATED 13/11/2015	GA-01-U-2995	Shri Sawaikar Ganpat Raghunath, Vante, Sattari Goa.		5000.00
325	Sattari	N/325 DATED 13/11/2015	GA-01-U-1052	Shri Sawaikar Ganpat Raghunath, Vante, Sattari Goa.		5000.00
326	Pernem	N/326 DATED 13/11/2015	GA-03-K-1573	Smt. D'Souza Silvia Joao, H. No. 9/82, Surbanwada, Pernem Goa.	9823203155	5000.00
327	Bicholim	N/327 DATED 08/12/2015	GA-02-T-9006	Shri Marathe Suraj Anant, H. No. 278, Barajan, Navelim, Bicholim Goa.		5000.00
328	Bardez	N/327 DATED 08/12/2015	GA-01-Z-0333	Shri Fernandes Willian, H.No. 258/1, Peddem, Mapusa, Bardez Goa.	9422456036	5000.00
329	Sattari	N/328 DATED 04/01/2016	GA-04-T-2864	Smt. Gawade Namita Balchandra, H. No. 101/1, Dhatwada, Pissurlem, Sattari Goa.		5000.00
330	Sattari	N/329 DATED 05/01/2016	GA-04-T-2352	Smt. Gawade Namita Balchandra, H. No. 101/1, Dhatwada, Pissurlem, Sattari Goa.		5000.00
331	Bardez	N/330 DATED 05/01/2016	GA-03-K-5916	Smt. Potl Anita Satchit, H. No. 385, Simvaddo, Arproa, Bardez Goa.	9822388259	5000.00
332	Bardez	N/331 DATED 07/01/2016	GA-03-N-7165	Shri Gad Lishant Ganpat, H. No. G/181, Near Hotel Priti International, Gaunsawaddo, MAPUSA, Bardez Goa.	9657256256	5000.00
333	Bicholim	N/332 DATED 14/01/2016	GA-02-V-6508	Shri Naik Amol Anil, H. No. 243, Deulwada, Cudnem, Sanquelim, Bicholim Goa.		5000.00
334	Bardez	N/334 DATED 21/01/2016	GA-03-N-7454	Nagvekar Nilesh Laximan, Sangolda Bardez Goa.	7972492022	5000.00
335	Vasco	N/335 DATED 01/02/2016	GA-02-V-5655	V.M. Salgaocar and Brother Pvt Ltd, Salgaocar House off Francisco Luis Gomes Road, Vasco-da-Gama Goa 403802.		5000.00
336	Sattari	N/336 DATED 03/02/2016	GA-01-V-0892	Mahajik Samir Mahadev, H. No. 31, Shantinagar, Pissurlem, Sattari Goa.		5000.00
337	Tiswadi	N/337 DATED 03/02/2016	GA-07-F-5456	Gurjao Fatima Olinda Corte Real, Sant Cruz, Tiswadi Goa.	8322459566	5000.00
338	Tiswadi	N/338 DATED 03/02/2016	GA-07-F-5466	Madkaikar Realtors Pvt Ltd, Mathias Plaza, 4th Floor, 18th June Road, Panaji Goa.		5000.00
339	Bardez	N/339 DATED 04/02/2016	GA-07-F-5463	M/s Mahalaxmi Water Supply, C/o Madkaikar Gauresh Naresh, Near Hanuman Temple Sonar Bhat, Verem Bardez Goa.		5000.00

340	Pernem	N/340 DATED 12/02/2016	GA-03-K-4464	Kaloji Sanjay Namdev, H. No. 270, Chonwaddo, Dhargal, Pernem - Goa	7744846666	3000.00
341	Sattari	N/341 DATED 12/02/2016	GA-01-U-0257	Sawaikar Anant Raghunath , H. No. 142, Vantem, Sattari Goa.		5000.00
342	Bardez	N/342 DATED	GA-03-T-9746	Badiger Rahul Shrikant, H. No. 347/-A, Xetia waddo, Mapusa, Bardez Goa.	9527765163	5000.00
343	Sattari	N/343 DATED 19/02/2016	GA-04-T-8333	Shri Shinde Sandeep Avinash, Deulwada, Pissurlem, Sattari Goa.		5000.00
344	Tiswadi	N/344 DATED 01/03/2016	GA-02-V-9051	Shri Deshpande Sunil Virupax H. No. 17/264/A, Santismowaddo, Taleigao Goa.	9822384112	5000.00
345	Bardez	N/345 DATED 01/03/2016	GA-03-K-4649	Shri Kanolkar Dilip Mahadev, H. No. 902/3, Chipul waddo, Tivim, Bardez Goa.	7798682148	5000.00
346	Bardez	N/346 DATED 04/03/2016	GA-03-N-7320	Korgaonkar Santosh Sadguru, H. No. 39, Karaswada, MAPUSA, p.o. (Tivim Industrial Estate) Bardez Goa.	9823149696	5000.00
347	Bicholim	N/347 DATED 10/03/2016	GA-04-T-2532	Mahesh Desai, H. No. 1855, Lamgao, Bicholim Goa.		5000.00
348	Bardez	N/348 DATED 10/03/2016	GA-01-U-3786	D'Costa Franscisco Edmundo, H. No. 308, Batti waddo, Nerul, Bardez Goa.		5000.00
349	Tiswadi	N/349 DATED 10/03/2016	GA-07-F-1948	Gomes Milagrina Manuel, H. No. 30, Morombi-O-Grande, Mercas, Tiswadi Goa.		5000.00
350	Bardez	N/350 DATED 10/03/2016	GA-01-U-4334	Parab Ratnakar Govind, Bardez	9604176318	5000.00
351	Bardez	N/351 DATED 15/03/2016	GA-03-N-7866	Naik Pravind Satvasil, Bardez Goa	9579581095	5000.00
352	Bardez	N/352 DATED 16/03/2016	GA-03-K-0346	Killedar Azim, H. No. 502, Olima waddo, Aradi, Soccorro, Porvorim Goa.		5000.00
353	Bicholim	N/353 DATED 16/03/2016	GA-04-T-1931	Malik Gopi Nagesh, H. No. 461, Gaonkar wade Cudnem, Bicholim Goa.		5000.00
354	Sattari	N/354 DATED 22/03/2016	GA-04-T-9578	Parab Ujwala Gajanan, Gaonkarwada, Pissurlem Sattari Goa.		5000.00
355	Sattari	N/355 DATED 22/03/2016	GA-01-U-5820	Parab Gajanan Vasant Gaonkarwada, Pissurlem Sattari Goa.		5000.00
356	Sattari	N/356	GA-04-T-5678	Parab Gajanan Vasant, Gaonkarwada, Pissurlem Sattari Goa.		5000.00
357	Sattari	N/357	GA-01-U-2478	Parab Gajanan Vasant, Gaonkarwada, Pissurlem Sattari Goa.		5000.00
358	Bicholim	N/358	GA-07-F-1570	Kanekar Sai Prasad Prabhakar, H. No. 143, Maulinthad, Sankhali, Bicholim Goa.		5000.00
359	PBArd	N/359	GA-03-N-7583	Nagvekar Sadanand Vitthurai, H. No. 981/2, Ambirna, Soccorro.		3000.00
360	Bardez	N/360 DATED 04/04/2016	GA-03-N-7841	Shri Nagvenkar Nilesh Laximan, H. No. 306/1, Livrament Vaddo, Sangolda, Bardez Goa.	7972492022	5000.00
361	Tiswadi	N/361 DATED 06/04/2016	GA-07-F-9998	Kerker Asmita Sandesh, H. No. 143, Boca-de-Vaca, Panaji Goa.	9923982892	3000.00

362	Bicholim	N/362 DATED 12/04/2016	GA-04-T-4041	Vishwasrao Desai Anand Vinayak Lamgao Bicholim Goa.		5000.00
363	Bicholim	N/363 DATED 12/04/2016	GA-04-T-3997	Vishwasrao Desai Anand Vinayak Lamgao Bicholim Goa.		5000.00
364	Ponda	N/364 DATED 18/04/2016	GA-03-N-4819	M/s M. Venkata Rao Infra Projects Pvt Ltd.		5000.00
365	Ponda	N/365 DATED 18/04/2016	GA-03-N-7602	M/s M. Venkata Rao Infra Projects Pvt Ltd.		5000.00
366	Ponda	N/366 DATED 18/04/2016	GA-03-N-7601	M/s M. Venkata Rao Infra Projects Pvt Ltd., Bhoma		5000.00
367	Bardez	N/367 DATED 19/04/2016	GA-01-Z-0858	Naroji Prakash Shankar, H. No. 12/27/14, Liticia Apartment, Flat No. A/6, 3rd Floor, Khorlim, Mapusa Goa.		5000.00
368	Sattari	N/368 DATED 28/04/2016	GA-01-Z-0858	Shri Desai Suresh Venkatesh, H. No. 95, Advoi, Sattari Goa.		5000.00
369	Bardez	N/369 DATED 02/05/2016	GA-04-T-3095	Shri Franscisco D'Costa Edmuno, Bhatti waddo, Nerul, Bardez Goa.		5000.00
370	Bardez	N/370 DATED 17/05/2016	GA-02-T-6336	Shri Durai , M/s Bagkiya Construction Pvt Ltd, H. No. 493, Bldg No. 3, SF-3 & SF-4, Techno Cidade, Chogm Road, Porvorim, Bardez Goa.		5000.00
371	Bardez	N/371 DATED 17/05/2016	GA-03-N-7955	Shri Badiger Mohanlal Rudra, H. No. 347, Dhuler, Mapusa, Bardez Goa.	9527765163	5000.00
372	Bardez	N/372 DATED 17/05/2016	GA-03-K-3933	Shri Badiger Mohanlal Rudra, H. No. 347, Dhuler, Mapusa, BARDEZ Goa.	9527765163	10000.00
373	Bardez	N/373 DATED 17/05/2016	GA-03-N-7580	Shri Chodankar Abhaya Sitaram, H. No. 688, P.O. Box, Anjuna, Badem, Bardez Goa.	9823153090	5000.00
374	Tiswadi	N/374 DATED 03/06/2016	GA-01-T-6785	Smt Parwar Sneha Sandeep, H. No. 931/02, Gaunchem Bhat, Mercedes Tiswadi Goa.		3000.00
375	Tiswadi	N/375 DATED 07/06/2016	GA-07-F-5631	Shri Peixoto Jose Bernardino, H. No. 101, Santismo waddo, behind St. Michael's Church, Taleigao, Tiswadi Goa.	9890161738	5000.00
376	Bardez	N/376 DATED 09/06/2016	GA-03-N-9669	Smt.Gurav Poonam Venkatesh, H. No. 2/1-A, Khotla, Saligao, Bardez Goa.	9822150969	5000.00
377	Bardez	N/377 DATED 14/06/2016	GA-01-W-6713	Shri Kalangutkar Bagulnath Shiva, H. No. 116, Sirsaim, Bardez Goa.	9604849859	5000.00
378	Bardez	N/378 DATED 28/06/2016	GA-03-N-7987	Shri Madgaonkar Pravin, Chapora Zhor waddo, Bardez Goa.		5000.00
379	Bardez	N/379 DATED 01/07/2016	GA-03-N-8126	Shri Fernandes Norreem C.C. Boa vista, Bastora, Bardez Goa.		5000.00
380	Salcete	N/380 DATED 05/07/2016	GA-08-V-0792	Shri Sawant Suresh Madhu, H. No. 262/B, Camurlim, Gawan Lotoulim, Salcete Goa.		5000.00
381	Bardez	N/381 DATED 18/07/2016	GA-09-T-5436	Shri Savant Mukesh Madhukar H. No. 161, Zorwaddo, Anjuna Bardez Goa.		3000.00

382	Bardez	N/382 DATED 18/07/2016	GA-03-N-6765	Shri Dilip Kalangutkar Sonu, H. No. 301/4, Livrament waddo, Sangolda, P.O., Saligao, Bardez Goa.	9326135405	3000.00
383	Bardez	N/383 DATED 18/07/2016	GA-03-N-7438	Kalangutkar Dilip Sonu, H. No. 301/4, Livrament vaddo, Sangolda, P.O. Saligao, Bardez Goa.	9326135405	3000.00
384	Sattari	N/384 DATED 18/07/2016	GA-04-T-1056	Parab Vasudev Ramnath Deulwada, Pissurlem, Sattari Goa.		5000.00
385	Bardez	N/385 DATED 18/07/2016	GA-03-T-4376	Poll Anita Satchit, Ximwaddo, Arpora, Bardez Goa.	9822388259	3000.00
386	Sattari	N/386 DATED 18/07/2016	GA-01-U-0709	Parab Ramnath Krishna, Deulwada, Pissurlem, Sattari Goa.		5000.00
387	Sattari	N/387 DATED 18/07/2016	GDS-2893	Parab Vasudev Ramnath, Deulwada, Pissurlem, Sattari Goa.		5000.00
388	Sattari	N/388 DATED 20/07/2016	GA-01-U-2195	Sawaikar Ganpat Raghunath, Post Advoi, Vantem, Sattari Goa.		5000.00
389	Bardez	N/389 DATED 20/07/2016	GA-03-T-3290	Smt Shobavati Namdev Naik Tuenkar, H. No.129, Mae-de-Deus waddo, Sangolda, Bardez Goa.	9823559467	5000.00
390	Bardez	N/390 DATED 30/07/2016	GA-03-N-0625	Smt Shobavati Namdev Naik Tuenkar, H. No.129, Mae-de-Deus waddo, Sangolda, Bardez Goa.	9823559467	5000.00
391	Sattari	N/391 DATED 20/07/2016	GA-01-U-1105	Shri Sawaikar Ganpat Raghunath, Post Advoi, Vantem Sattari Goa.		5000.00
392	Sattari	N/392 DATED 20/07/2016	GA-01-U-5266	Shri Sawaikar Ganpat Raghunath, Post Advoi, Vantem Sattari Goa.		5000.00
393	Vasco	N/393 DATED 22/07/2016	GA-02-V-6432	V.M.Salgaocar And Brother Pvt. Ltd., Salgaocar House, Off. Francisco Luis Gomes Road, Vasco-da-Gama		5000.00
394	Vasco	N/394 DATED 22/07/2016	GA-06-T-2150	V. M. Salgaocar And Brother Pvt. Ltd., Salgaocar House, Off. Francisco Luis Gomes Road, Vasco-da-Gama		5000.00
395	Vasco	N/395 DATED 22/07/2016	GA-06-T-2181	V. M. Salgaocar And Brother Pvt. Ltd., Salgaocar House, Off. Francisco Luis Gomes Road, Vasco-da-Gama		5000.00
396	Vasco	N/396 DATED 22/07/2016	GA-06-T-2114	V. M. Salgaocar And Brother Pvt. Ltd., Salgaocar House, Off. Francisco Luis Gomes Road, Vasco-da-Gama		5000.00
397	Vasco	N/397 DATED 22/07/2016	GA-06-T-2229	V. M. Salgaocar And Brother Pvt. Ltd., Salgaocar House, Off. Francisco Luis Gomes Road, Vasco-da-Gama		5000.00
398	Sattari	N/398 DATED 22/07/2016	GA-01-T-1535	Shri. Parab Ramnath Krishna, Deulwada, Pissurlem, Sattari - Goa.		5000.00
399	Bardez	N/399 DATED 01/08/2016	GA-03-N-7545	Shri. Asnodkar Viraj Vinayak, H. No. 578/3, Butki waddo, Porvorim, Bardez - goa.	9850461812	3000.00
400	Tiswadi	N/400 DATED 04/08/2016	GA-07-F-5573	Shri. Naik Umesh Raghuvir, H. No. E-5, Near Govt. Agriculture Farm, Ella, Old - Goa.	9970444713	3000.00

401	Bardez	N/401 DATED 05/08/2016	GA-03-N-6904	Smt. Asnodkar Siya Siraj, H. No. 670/3, Bhutki waddo, Porvorim, Bardez - Goa.	9075037051	3000.00
402	Sattari	N/402 DATED 08/08/2016	GDS-5266	Shri. Sawaikar Ganpat Raghunath, Post Advoi, Vantem, Sattari - Goa.		5000.00
403	Sattari	N/403 DATED 08/08/2016	GA-01-U-9295	Shri. Sawaikar Ganpat Raghunath, Post Advoi, Vantem, Sattari - Goa.		5000.00
404	Bardez	N/404 DATED 10/08/2016	GA-03-N-9219	Shri. Mandrekar Sudin Ramkrishna, H. No. 267, Livramento waddo, Sangolda, Bardez - Goa.	8007036815	5000.00
405	Tiswadi	N/405 DATED 18/08/2016	GA-07-F-5780	Alcon Constructions (Goa) Pvt. Ltd., Regst. Office at Velho Building, First Floor, Panaji - Goa.	9850357235	5000.00
406	Tiswadi	N/406 DATED 29/08/2016	GA-07-F-9729	Shri. Dias Medavid, H. No. 73/B, Bandh, Santa Cruz, Tiswadi - Goa.	9823096092	5000.00
407	Tiswadi	N/407 DATED 14/09/2016	GA-07-F-5030	Smt. Naik Sushma Hari, H. No. 217, Near Rukmini Appts. St. Inez.	7517407915	5000.00
408	Bardez	N/408 DATED 21/09/2016	GA-01-Z-4070	Smt. Kolwalkar Pranita Pradeep, H. No. 296/1, Huddo waddo, Bardez - Goa	9923473296	3000.00
409	Bardez	N/409 DATED 21/09/2016	GA-01-Z-4050	Smt. Kolwalkar Pranita Pradeep, H. No. 296/1, Huddo waddo, Bardez - Goa	9923473296	3000.00
410	Bicholim	N/410 DATED 26/09/2016	GA-01-T-2184	Shri. Vidhyanand Karbotkar, 1350, Deus Bhatwadi, Mayem, Bicholim - Goa.		5000.00
411	Tiswadi	N/411 DATED 05/10/2016	GA-07-F-0712	Shri. Estrocio Pedro, Borchem Bhat, Caranzalem, Ilhas, Tiswadi - Goa.	9822387458	5000.00
412	Pernem	N/412 DATED 12/10/2016	GA-01-T-1176	Shri. Shiroadkar Mahesh Dasharath, H. No. 507, Chichola, Dhargal, Pernem - Goa.		5000.00
413	Bardez	N/413 DATED 20/10/2016	GA-03-N-8348	Shri. Nagvekar Sudanand Vithurai, H. No. 981/2, Ambirna, Socorro, Porvorim, Bardez - Goa.	8806990808	3000.00
414	Pernem	N/414 DATED 24/10/2016	GA-07-T-6667	Shri. Shetgaonkar Laxman Gangaram, Kattewada, Morjim, Pernem - Goa.		3000.00
415	Bardez	N/415 DATED 26/10/2016	GA-03-T-2323	Shri. Pontes Wency Godfrey, H. No. 529/B, Assonora, Bardez - Goa.	7620050765	5000.00
416	Bardez	N/416 DATED 03/11/2016	GA-03-N-2262	Shri. Marcues Milton, H. No. 373, Verla, Mapusa, Bardez - Goa.	9822580198	3000.00
417	Bardez	N/417 DATED 07/11/2016	GA-03-N-9154	Smt. Vaigankar Pratima Pradeep, H. No. 272/32, Kailash Nagar, Assonora, Bardez - Goa.		5000.00
418	Bicholim	N/418 DATED 23/11/2016	GA-01-W-0355	Smt. Naik Pushpavati Narsinha, H. No. 310, Ghongre, Maina, Navelim, Bicholim Goa.		5000.00
419	Bicholim	N/419 DATED 23/11/2016	GA-01-U-1818	Shri Navelkar Vidhyanand Vinayak, H. No. 348, Maina, Navelim, Sankhali, Bicholim Goa.		5000.00
420	Sattari	N/420 DATED 23/11/2016	GA-04-T-3131	Shri Parab Anand Vithal Gaonkar wada, Pissurlem, Sattari Goa.		5000.00

421	Bardez	N/421 DATED 01/12/2016	GA-03-N-9285	Shri Araujo Joaquim Alfredo, H. No. 131, Trindade vaddo, Arpora, Bardez Goa.	9822197488	5000.00
422	Tiswadi	N/422 DATED 16/12/2016	GA-07-F-5938	Shri Fernandes Joao Piedade, E211 Souto Maior, Bazar waddo, Caranzalem, Tiswadi Goa.	9370538207	3000.00
423	Bardez	N/423 DATED 20/12/2016	GA-03-N-7456	Smt Parulekar Asha Pradeep, H. No. 5/34, Donvaddo, Saligao, Bardez Goa.		5000.00
424	Sattari	N/424 DATED 28/12/2016	GA-01-T-1505	Shri Sawaikar Paresh Ganpat, Vantem, Sattari Goa.		5000.00
425	Bardez	N/425 DATED 28/12/2016	GA-03-K-9268	Riverside Resorts & Holiday Homes Private Limited., Bardez Goa.	9623269099	3000.00
426	Sattari	N/426 DATED 28/12/2016	GA-01-Z-1016	Smt. Gawas Pradnya Prakash, H. No. 32, Voliem, Sattari.		5000.00
427	Bicholim	N/427 DATED 29/12/2016	GA-01-U-2866	Shri Digamber Ankush Naik, H. No. 62, Ward No. II, Madhala wada, Mayna, Naveli, Sankhali Goa. 403505.		5000.00
428	Bardez	N/428 DATED 29/12/2016	GA-03-N-6684	Smt. D'Souza Fatima Silvina, H. No. 4/239, Agar vaddo, Calangute, Bardez - Goa.		5000.00
429	Tiswadi	N/429 DATED 29/12/2016	GA-03-K-0808	Shri. Mayenkar Dinesh Shantaram, H. No. 143, Chincholem, Bhatlem, Near Datta Mandir.		3000.00
430	Sattari	N/430 DATED 18/01/2017	GA-01-T-1508	Shri. Sawaikar Paresh Ganpat, Vantem, Sattari - Goa.		5000.00
431	Bardez	N/431 DATED 20/01/2017	GA-01-V-7956	Smt. Anitha Mathew Vallikkappen, H. No. 465, Auchit vaddo, Assonora, Bardez - Goa.		5000.00
432	Bicholim	N/432 DATED 23/01/2017	GA-02-V-6988	Smt. Gaonkar Janavi Jayant, H. No. 27/1, Wadacha wada, Shirgao, Bicholim - Goa.		5000.00
433	Bicholim	N/433 DATED 23/01/2017	GA-04-T-3875	Shri. Desai Rajiv Ganpatrao, H. No. 1855, Lamgao, Madhlawada, Bicholim - Goa.		5000.00
434	Tiswadi	N/434 DATED 01/02/2017	GA-09-U-0063	J. P. Nunes & Sons, H. No. 183, Near Main Post Office, Panaji - Goa.	9822133519	3000.00
435	Tiswadi	N/435 DATED 01/02/2017	GA-07-F-6104	Vaz Peter Socorro, Bungalow no. 4, Models Meridian Marine Road, Caranzalem, Tiswadi - Goa.		5000.00
436	Sattari	N/436 DATED 06/02/2017	GDS-6763	Shri. Parab Vasudev Ramnath, Deulwada, Pissurlem, Sattari - Goa.		5000.00
437	Bicholim	N/437 DATED 06/02/2017	GA-04-T-5042	Shri. Kamat Tukaram Vasant, H. No. 90/1, Gaonkar wada, Viridi, Sankhali - Goa.		5000.00
438	Bardez	N/438 DATED 17/02/2017	GA-03-N-9893	Shri. Naik Ramnath Ramesh, H. No. 685, Near S. T. Stand, Betim, Penha-de-France, Bardez - Goa. (Stands cancelled)	9822160804	5000.00
439	Tiswadi	N/439 DATED 08/03/2017	GA-07-F-9595	Shri Parvatkar Ramdas Mahadev, H. No. 271/M, Corlim, Mollar, Tiswadi Goa.	9822166144	5000.00
440	Tiswadi	N/440 DATED 08/03/2017	GA-04-T-1366	Shri H.L. Nathurmal, Third Floor, Rizvi Chambers, Panaji-Goa.		5000.00
441	Bardez	N/441 DATED 14/03/2017	GA-03-W-0014	Shri Tari Babli Govind, H. No. 640, Batkar wada, Porvorim, Socorro, Bardez Goa.		3000.00

442	Bicholim	N/442 DATED 16/03/2017	GA-01-Z-0668	Shri Matonkar Mahesh Arjun, H. No. 1422, Industrial Estate, Bicholim Goa.		3000.00
443	Bardez	N/443 DATED 16/03/2017	GA-03-N-9965	Shri Kudnekar Anil Pandurang, H. No. 6/93-1, Sonarbhat, Saligao, Bardez Goa.	9822586125	5000.00
444	Bicholim	N/444 DATED 16/03/2017	GA-01-T-7196	Shri Matonkar Mahesh Arjun, H. No. 1422, Industrial Estate, Bicholim Goa.		5000.00
445	Bicholim	N/445 DATED 16/03/2017	GA-07-F-1591	Shri Matonkar Mahesh Arjun, H. No. 1422, Industrial Estate, Bicholim Goa.		5000.00
446	Bicholim	N/446 DATED 24/03/2017	GA-01-W-5976	Smt. Janavi Jayant Gaonkar, H. No. 27/1, Wadacha wada, Shirgao, Bicholim Goa.		5000.00
447	Tiswadi	N/447 DATED 27/03/2017	GA-03-K-4465	Shri Sawant Gajendra Mahableshwar, H. No. 816, Rambhuvan wada, Cumbharjua Tiswadi- Goa.		5000.00
448	Bicholim	N/448 DATED 31/03/2017	GA-01-T-5510	Smt. Hoble Mukta Pundalik Near Vithal Rukmini Temple, Haldan wadi, Mayem, Bicholim Goa.		5000.00
449	Bicholim	N/449 DATED 06/04/2017	GDS-7840	Shri Gaonkar Krishna Sagun H. No. 1521, Gaonkarwada, Bicholim Goa.		5000.00
450	Bardez	N/450 DATED 07/04/2017	GA-03-W-0085	Shri Poll Anita Satchit H. No. 385, Shimwaddo, Arpora, Bardez Goa.	9822388259	5000.00
451	Sattari	N/451 DATED 10/04/2017	GA-08-U-6446	Infrastructure Logistics Pvt Ltd, Pissurlem, Sattari Goa.		5000.00
452	Bardez	N/452 DATED 12/04/2017	GA-07-F-6312	Shri Shiroadkar Rupesh Tulshidas, H. No. 118, Near Zarim, Fountainhas, Mala- Panaji Goa.		5000.00
453	Bicholim	N/453 DATED 17/04/2017	GA-01-U-2619	Shri Chiknekar Vinod Shankar, H. No. 76/C, Chiknam, Kudnem, Sanquelim Goa.		5000.00
454	Tiswadi	N/454 DATED 20/04/2017	GA-02-V-7679	Smt. Gauns Vanita Mukund, H. No. 25/2, Zaribhat, Pilar, Tiswadi Goa.		3000.00
455	Bicholim	N/455 DATED 27/04/2017	GA-01-U-1308	Smt. Shetye Malini Pandurang, H. No. 1055, MAYEM Poirra, Bicholim Goa.		5000.00
456	Bicholim	N/456 DATED 12/05/2017	GA-02-U-5547	Shri Gaonkar Laxman Yesu., H. No. 21, Vadacha waddo, Shirgao, Bicholim Goa.		5000.00
457	Bardez	N/457 DATED 17/05/2017	GA-03-W-0324	Soares Silvano Caraciolo, H. No. 435, Marra, Pilerne, Bardez Goa.	9890161738	5000.00
458	Sattari	N/458 DATED 30/05/2017	GA-01-U-0355	Sawaikar Pareshe Ganpat, Vantem, Sattari Goa.		5000.00
459	Bicholim	N/459 DATED 31/05/2017	GA-02-V-7117	Smt. Kalangutkar Pragati Mayur, H. No. 155/1, Kalam wada, Advalpal, Bicholim Goa.		5000.00
460	Ponda	N/460 DATED 31/05/2017	GA-01-W-7322	Shri Sandio Nilkanth Nigalye, Khadpabandh, Ponda Goa.		3000.00
461	Tiswadi	N/461 DATED 07/06/2017	GA-07-F-6171	Shri Peixoto Bosco, Santissimo, Taleigao, Tiswadi Goa.	9890161738	5000.00
462	Bicholim	N/462 DATED 28/06/2017	GA-01-U-0952	Ghatwal Sheela Sandeep, H. No. 12/6, Poirra Mayem Bicholim Goa.		5000.00
463	Quepem	N/463 DATED 28/06/2017	GA-09-U-9211	Pai Dukle Shrinivas Ramchandra, H. No. 157/1, Sirvai, Quepem Goa.		3000.00

464	Bardez	N/464 DATED 10/07/2017	GA-03-AH-7755	Shri D'Souza Domnic Lorens, H. No. 315/4, Topa-Sodiem Siolim, Bardez Goa.		5000.00
465	Bicholim	N/465 DATED 11/07/2017	GA-04-T-4774	Sainath Datta Naik Chawdikar, H. No. 158, Ambikanagar, Bhamai- Pale, Bicholim Goa.		5000.00
466	Bardez	N/466 DATED 07/08/2017	GA-03-W-0490	Dias Michael, H. No. 288, Livrament waddo Sangolda, Bardez Goa.		5000.00
467	Tiswadi	N/467 DATED 16/08/2017	GA-01-Z-2525	Divkar Rohan Dilip, 200, Cardoz waddo, Taleigao Goa.	7261961599	5000.00
468	Bardez	N/468 DATED 05/09/2017	GA-01-Z-2821	Malvankar Ramdas Tukaram, H. No. 62/1, Gongere, Assgao, Bardez Goa.	8805192644	3000.00
469	Bicholim	N/469 DATED 10/10/2017	GA-04-T-5077	Prabhukhanolkar Seema Vasudev, H. No. 200/2, Mardawada, Advalpal, Bicholim		5000.00
470	Tiswadi	N/470 DATED 10/10/2017	GA-07-F-6603	Gomes Nobert, H. No. 216, Ekka waddo, Carambolim, Tiswadi Goa.	9822180664	5000.00
471	Bardez	N/471 DATED 21/10/2017	GA-03-W-0537	Bhonsle Damodar R, H. No. 25, Fair Price Shop, Anjuna Bardez Goa.		5000.00
472	Pernem	N/472 DATED 31/10/2017	GA-11-T-1602	Shri Salgaonkar Rajendra Arjun, Ponshi wada, Pernem Goa.	9923489555	5000.00
473	Tiswadi	N/473 DATED 31/10/2017	GA-07-F-6668	Shri Morajkar Laximan Vasant, H. No. 286/A, Vodlem Bhat, St. Cruz Tiswadi Goa.	9623939990	5000.00
474	Pernem	N/474 DATED 06/11/2017	GA-03-K-9594	Shri Kava Thankar D Bhalchandrarai resident of H. No. 131, Casnem Pernem Goa.	9823871292	3000.00
475	Bardez	N/475 DATED 09/11/2017	GA-03-K-4649	Shri Kanolkar Dilip Mahadev, H. No. 902/3, Chipulwada, Cansa Tivim, Bardez Goa.		5000.00
476	Tiswadi	N/476 DATED 28/11/2017	GA-04-T-2554	M/s Sesa Resource Limited, Office at Sesa Ghor, ZO EDC Complex, Patto, Panaji- Goa	9823455926	5000.00
477	Tiswadi	N/477 DATED 28/11/2017	GA-04-T-2555	M/s Sesa Resource Limited, Office at Sesa Ghor, ZO EDC Complex, Patto, Panaji- Goa	9823455926	5000.00
478	Bardez	N/478 DATED 01/12/2017	GA-03-W-1165	M/s Bagkiya Construction Pvt Ltd, Bldg No. 03, S F-3 & S F-4, Techno Cidade Chogum Road, Porvorim, Bardez goa.	9527765163	5000.00
479	Bardez	N/479 DATED 01/12/2017	GA-03-W-1164	M/s Bagkiya Construction Pvt Ltd, Bldg No. 03, S F-3 & S F-4, Techno Cidade Chogum Road, Porvorim, Bardez goa.	9527765163	5000.00
480	Bardez	N/480 DATED 11/12/2017	GA-03-W-0932	Shri Kalangutkar Dilip Sonu, R/o Livrament waddo, P.O. Saligao, Sangolda Bardez Goa.	9326135405	3000.00
481	Bardez	N/481 DATED 11/12/2017	GA-03-W-1516	Shri Kerkakr Dactu Shantaram, H. No. 496, Mudda wadi, Saligao Bardez Goa.	9822151646	5000.00
482	Bicholim	N/482 DATED 13/12/2017	GA-02-V-6670	Shri Ghadi Timlo Purso, 515, Ghadiwada, Surla Bicholim Goa.		5000.00
483	Tiswadi	N/483 DATED 18/12/2017		Shri Kunkolkar Uday Bhaskar, H. No. 81, Oityant, Taleigao, Tiswadi Goa.		5000.00

484	Bardez	N/484 DATED 03/01/2018	GA-03-W-1202	Shri Gad Lishant Ganpat, H. No. G/181, Near Hotel Priti Internation, Gaunsawaddo, Mapusa Goa.	9657256256	5000.00
485	Bardez	N/485 DATED 09/01/2018	GA-03-W-1117	Shri. Mapsekar Nilima Madhu, H.No. 226, Prabhu waddo, Calangute Bardez Goa.	9822136733	5000.00
486	Bardez	N/486 DATED 10/01/2018	GA-03-K-0332	Shri Govekar Krishna Mohan, H. No. 90, Near P & T Colony, Alto Porvorim, Bardez Goa.	9049936023	5000.00
487	Bicholim	N/487 DATED 02/02/2018	GA-04-T-3007	Shri Gawas Latika Laxmikant H. No. 24/18, Durigwada, Navelim, Sankhali, Bicholim Goa.		5000.00
488	Pernem	N/488 DATED 22/02/2018	GA-11-T-1721	Shri Kambli Pradip Purshottom Shemyacheadvan, Warkhand, Pernem Goa.		3000.00
489	Bardez	N/489 DATED 26/02/2018	GA-07-F-9898	Shri Mayenkar Manoj Shantaram, H. No. 36, GPS Chincholim, Bhatlem, Panaji Goa.	9823635396	5000.00
490	Bicholim	N/490 DATED 29/03/2018	GA-01-V-1431	Shri Rajiv G.V. Desai, H. No. 1855, Lamgao, Bicholim Goa, Lamgao, Mulgao, Mayem & Siridao.		5000.00
491	Pernem	N/491 DATED 03/04/2018	GA-11-T-1628	Shri Fernandes Ghabru Frances, Ponoscode, Pernem Goa.	7066555487	5000.00
492	Bardez	N/492 DATED 09/04/2018	GA-03-W-9319	Shri Mandrekar Sudin Ramkrishna, H. No. 267, Livrament waddo, Sangolda Bardez Goa.	8007036815	5000.00
493	Tiswadi	N/493 DATED 09/04/2018	GA-03-K-0808	Shri Mayenkar Dinesh Shantaram, H. No. 136, Near Datta Mandir, Chincholem Goa.	9823635396	3000.00
494	Bardez	N/494 DATED 09/04/2018	GA-03-W-0861	Shri Madgaonkar Pravin Foti, H. No. 189, Zhor waddo, Chapora, Anjuna, Bardez Goa.	9545942593	5000.00
495	Bardez	N/495 DATED 13/04/2018	GA-03-T-6915	Smt Malik Suchita Narayan, H. No. 299, Maina waddo, Pilerne Bardez Goa.		5000.00
496	Bardez	N/496 DATED 18/04/2018	GA-03-W-0116	Azim Babusab Killedar, H. No. 502, Aradi, Socorro, Bardez Goa.		5000.00
497	Bardez	N/497 DATED 18/04/2018	GA-03-W-2036	Nilesh Laximan Ngvenkar, H. No. 306/1, Livrament waddo, Sangolda, Bardez Goa.	7972492022	5000.00
498	Bardez	N/498 DATED 18/04/2018	GA-03-W-2099	Shri Tari Suresh Kashinath, H. No. 399/1, Vaigan waddo, Nachinola Bardez Goa.	9822153369	5000.00
499	Bicholim	N/499 DATED 23/04/2018	GA-03-N-9893	Shri Anand Manguesh Mandrekar, Bicholim Goa.		5000.00
500	Pernem	N/500 DATED 14/05/2018	GA-11-T-1795	Shetye Rameshwari Ramnath, H. No. 770/A, Pethechawada, Korgao, Pernem - Goa.	9422579350	5000.00
501	Bicholim	N/501 DATED 14/05/2018	GA-04-T-5677	Shri. Chari Anil Pundalik, H. No. 32, Savordem, Sattari - Goa.		5000.00
502	Bardez	N/502 DATED 27/06/2018	GA-03-W-2421	Shri. Jambavalikar Ekanath Narayan, Munang waddo, Assagao, Bardez - Goa.	9823930101	5000.00
503	Bardez	N/503 DATED 26/07/2018	GA-01-Z-1120	Shri D'Souza Philip Joseph, H. No. 244, Bhali waddo, Nerul, Porvorim, Bardez Goa.		5000.00
504	Tiswadi	N/504 DATED 30/07/2018	GA-03-T-3809	Shri Naik Sudam Suryakant, H. No. 158, Guddi wadda, Neura, Tiswadi Goa.	7875040419	5000.00

505	Bardez	N/505 DATED 09/08/2018	GA-01-X-0409	Kadamba Transport Corporation Ltd, , Alto Porvorim, Bardez Goa.		5000.00
506	Bicholim	N/506 DATED 10/10/2018	GA-01-T-3695	Shri Marathe Suraj Anant, Barajan Navelim Bicholim - Goa		5000.00
507	Pernem	N/507 DATED 15/10/2018	GA-11-T-1821	Shri Krishna Vasudev Thankur, Pernem	9823741561	3000.00
508	Tiswadi	N/508 DATED 16/10/2018	GA-01-T-6280	Shri D'Souza Domina Bernard, H. No. 620/C Donapaula.	9823727872	5000.00
509	Salcete	N/509 DATED 16/10/2018	GA-09-U-9211	Smt. Pai Dukle Jaimala Shrinivas, H. No. 37/A Jai Niwas Dicarpati Salcete.		5000.00
510	Bardez	N/510 DATED 24/10/2018	GA-03-W-0290	Shri Sawant Rohit, Amey Residency, 2nd Floor, Flat No. F 7, Sanjay nagar, Porvorim, Bardez Goa.	9921843421	
511	Bardez	N/511 DATED 29/10/2018	GA-03-W-7786	Khatib Abbas Chandsab, H. No. 204, Peddem, Mapusa Bardez Goa.	9822169154	3000.00
512	Bardez	N/512 DATED 29/10/2018	GA-03-K-6892	Khatib Abbas Chandsab, H. No. 204, Peddem, Mapusa Bardez Goa.	9822169154	3000.00
513	Tiswadi	N/513 DATED 29/10/2018	GA-07-F-7459	Shri Desai Narendra Chandrakant, H. No. 81/5, Panvelim, St. Pedro Goa Vela Tiswadi Goa.	9527819746	5000.00
514	Bicholim	N/514 DATED 26/11/2018	GA-04-T-5042	Smt. Tanvi Tukaram Kamat H. No. 90/1, Gaonkar wada, Virdi, Sankhali Goa.		5000.00
515	Bardez	N/515 DATED 07/12/2018	GA-03-W-5120	Shri Kalangutkar Prakash Manguesh, H. No. 721, Dandowada, Nerul, BARDEZ Goa.	9822144289	5000.00
516	Bardez	N/516 DATED 11/12/2018	GA-03-K-9268	Riverside Resorts & Holiday Homes Private Limited, Bardez	9623269099	3000.00
517	Bardez	N/517 DATED 11/12/2018	GA-03-W-4863	Shri Madkaikar Gauresh Naresh, Near Hanuman Temple, Sonarbhat Verem, Reis Magos, Bardez Goa.	9822580980	5000.00
518	Tiswadi	N/518 DATED 18/12/2018	GA-07-F-7637	Shri Rodrigues Carlos, H. No. 696, Marinel, Donapaula, Tiswadi Goa.	9822181763	5000.00
519	Bardez	N/519 DATED 20/12/2018	GA-03-W-4717	Shri Naik Udai Bharat, H. No. 440/2, Socolwaddo Assagao, Bardez Goa	7057922522	5000.00
520	Bicholim	N/520 DATED 20/12/2018	GA-04-T-5202	Shri Joshi Uday Chandrakant H. No. 525, Joshi Residency, Vithalpur, Sanquelim Goa.		5000.00
521	Pernem	N/521 DATED 27/12/2018	GA-11-T-2001	Shri Salgaonkar Rajendra Arjun, Resident of Panshi wada, Pernem Goa.	9923489555	5000.00
522	Bardez	N/522 Dated 15/01/2019	GA-03-N-7398	Shri Nityanand R. Kanolkar, H. No. 105/5, Indira Nagar KARASWADA, Mapusa, Bardez Goa.	8668865388	5000.00
523	Tiswadi	N/523 Dated 28/01/2019	GA-01-T-8062	Shri Mayenkar Dinesh Shantaram, H. No. 136, Near Datta Mandir, Chincholem, Taleigao, Tiswadi Goa.	9158898874	3000.00
524	Bardez	N/524 Dated 29/01/2019	GA-03-N-0625	Shri Naik Tuenkar Ratnesh Namdev, H. No. 129 Mae de Deus vaddo Sangolda, Bardez Goa.	9823559467	5000.00
525	Bardez	N/525 Dated 29/01/2019	GA-03-T-3290	Shri Naik Tuenkar Ratnesh Namdev, H. No. 129 Mae de Deus vaddo Sangolda, Bardez Goa.	9823559467	5000.00

526	Tiswadi	N/526 DATED 30/01/2019	GA-07-F-6708	Shri Kunkolkar Uday Bhaskar, H. No. 81, Oitiyant, Taleigao Tiswadi Goa.	9822142609	5000.00
527	Bardez	N/527 DATED 30/01/2019	GA-03-N-3290	Shri Naik Tuenkar Ratnesh Namdev, H. No. 129 Mae de Deus vaddo Sangolda, Bardez Goa.	9823559467	5000.00
528	Bardez	N/528 DATED 30/01/2019	GA-03-N-0625	Shri Naik Tuenkar Ratnesh Namdev, H. No. 129 Mae de Deus vaddo Sangolda, Bardez Goa.	9823559467	5000.00
529	Bardez	N/529 DATED 11/02/2019	GA-03-W-1794	Shri Monteiro Minguel Caitan, Assagao. Bardez Goa.	9011063985	5000.00
530	Tiswadi	N/530 DATED 18/02/2019	GA-03-N-1771	Shri Naik Sudam Suryakant, H. No. 158, Guddi wadda, Neura, Tiswadi Goa.	7875040419	5000.00
531	Bardez	N/531 DATED 08/03/2019	GA-03-W-0200	Shri Chodankar Abhaya Sitaram, H. No. 688, P.O. Box, Anjuna Badem, Bardez Goa.	8975606100	5000.00
532	Tiswadi	N/532 DATED 17/04/2019	GA-07-F-8053	Shri Desai Narendra Chandrakant, H. No. 7/3 B, Om Datta Niwas, Baiguinim, Old Goa Tiswadi Goa.	9527819746	5000.00
533	Bardez	N/533 DATED 02/05/2019	GA-03-W-6303	Mr. Keni Dinesh Gopal, H. No. G-6, Valley Mist Pundalik Nagar, Porvorim, Bardez Goa.	8669321567	5000.00
534	Tiswadi	N/534 DATED 07/05/2019	GA-02-Z-6128	Shri Gomes Pedro Lourenco, Flat No. F2, Rudra Complex behind Holy Cross, Bambolim Goa.	9822384112	5000.00
535	Bardez	N/535 DATED 09/05/2019	GA-03-W-6849	Shri Poll Satchit Pandurang, H. No. 385, Simvaddo, Arpora, Bardez Goa.	9822388259	5000.00
536	Tiswadi	N/536 DATED 13/05/2019	GA-02-V-9051	Shri Gomes Pedro Lourenco, Flat No. F2, Rudra Complex behind Holy Cross, Bambolim Goa.	9822384112	5000.00
537	Bardez	N/537 DATED 17/05/2019	GA-02-K-3084	Shri Killedar Zoheb, H. No. 502, D'lima waddo, Aradi, Socorro, Bardez Goa.	9850679556	5000.00
538	Tiswadi	N/538 DATED 30/05/2019	GA-06-T-0561	Ms. Borkar Shubavi Surendra, H. No. 500/36, Nadkarni Riveira Alto, St. Cruz Calapor Tiswadi Goa.	7385927117	5000.00
539	Bardez	N/539 DATED 03/06/2019	GA-03-W-7241	Pradeep Kanta Narvekar, H. No. 4/634/A, Shetyewado, Duler, Mapusa, Bardez Goa.	9766994698	5000.00
540	Bardez	N/540 DATED 11/06/2019	GA-03-T-3917	Rajesh Parab, 359/1, Takwaddo, Revora, Bardez Goa.		5000.00
541	Bicholim	N/541 DATED 18/07/2019	GA-04-T-4493	Shri Kamat Tukaram Vasant, H. No. 90/1 Gaonkar wada, Viridi, Sanquelim, Bicholim Goa.		
542	Bardez	N/542 DATED 07/08/2019	GA-03-W-6116	Kalangutkar Dilip Sonu, H. No. 301/4, Livrament vaddo, Sangolda, P.O. Saligao, Bardez Goa.	9326135405	
543	Bardez	N/543 DATED 30/08/2019	GA-03-W-5826	Shri Arolkar Nikhil Sadanand, H. No. 760/18, Near Dr. Bhali Hospital, Porvorim, Bardez Goa.		5000.00
544	Bardez	N/544 DATED 17/09/2019	GA-03-W-0834	Shri Hiroji Sandeep Dashrath, Tivai waddo Calangute Bardez Goa. (Cancelled)	9822687183	5000.00

545	Tiswadi	N/545 DATED 20/09/2019	GA-07-F-8447	Shri Naik Rajendra Rohidas, H. No. 1280, Near Sai Temple, Chameren, Chodan Tiswadi- Goa.		5000.00
546	Tiswadi	N/546 DATED 24/09/2019	GA-07-F-0535	Shri Akhadkar Vevek Kamlakant, H. No. 176, Fondvem, Ribandar, Tiswadi Goa.	7588829991	5000.00
547	Bardez	N/547 DATED 24/09/2019	GA-03-T-9119	Shri Nagvenkar Nilesh Laximan, H. No. 306/1, Livrament Vaddo, Sangolda, Bardez Goa.	7972492022	5000.00
548	Tiswadi	N/548 DATED	GA-07-T-2840	Shri Fernandes Ronny, H. No. 250, Poilem Bhat, Vaddy, Morambi-O-Grande, Tiswadi Goa.	9822153122	5000.00
549	Tiswadi	N/549 DATED 17/02/2019	GA-07-F-8490	Shri Kankonkar Anup Rama, H. No. 432, Aivao, DonaPaula, Tiswadi Goa.	8805541916	833.00
550	Bardez	N/550 DATED 04/11/2019	GA-03-W-0834	Shri Hiroji Sandeep Dashrath, Tivai waddo Calangute Bardez Goa.		5000.00
551	Bardez	N/551 DATED 04/11/2019	GA-01-Z-0159	House of Furniture Makers, Tivim Industrial Estate, Caraswada, Bardez goa.		3000.00
552	Tiswadi	N/552 DATED 26/11/2019	GA-07-F-8578	Shri Fernandes Joaquim, H. No. 1192, Santa Cruz, Ilhas Goa.		5000.00
553	Tiswadi	N/553 DATED 27/11/2019	GA-07-F-8552	Peixoto Bosco, H. No. 101, Santissimo vaddo, behind St. Michael's Church Taleigao, Tiswadi Goa.	9890161738	5000.00
554	Bardez	N/554 DATED 04/12/2019	GA-03-T-3917	Shri Parab Rajesh Ramesh, H. No. 257, Tank wado, Revora, Bardez Goa.		5000.00
555	Tiswadi	N/555 DATED 03/01/2020	GA-07-K-8738	Shri Morajkar Vishvesh Laxman, H. No. 286/A, Vodlem bhat, St.Cruz, Tiswadi- Goa.		5000.00
556	Tiswadi	N/556 DATED 07/01/2020		Monteiro David Anthony, H. No. 331, Opp Alfred Aparts, Kerant, Caranzalem Ilhas, Tiswadi Goa.	9822153436	5000.00
557	Tiswadi	N/557 DATED 18/02/2020	GA-07-T-2880	Fernandes Francisco Rony, H. No. 250, Poilem bhat vaddy, Morombi-O-Grande, Tiswadi Goa.	9822153122	5000.00
558	Bardez	N/558 DATED 24/02/2020	GA-03-W-9393	Mrs. Lata Jaidev Agarwadekar, H. No. 360, Tintowado, Nerul, Bardez Goa	9822123749	5000.00
559	Bardez	N/559 DATED 24/02/2020	GA-03-W-6681	Mr. Agarwadekar Jaiddev Suryakant, Nerul, Tintowaddo, Bardez Goa, Nerul.	9822123749	5000.00

560	Bardez	N/560 DATED 05/03/2020	GA-03-W-9939	Shri Simepurushkar Jitendra Jaideo, H. No. 6/41-B, Khobrawaddo, Calangute, Bardez Goa.		5000.00
561	Bardez	N/561 DATED 18/03/2020	GA-03-W-9109	R.S.Water Supply (Properitor Ramchandra E.Sonsulkar) H. No.61/14, Khorlim, Mapusa, Bardez Goa.		5000.00
562	Bardez	N/562 DATED 20/03/2020	GA-03-W-9108	R.K.Water Supply (Properitor Rajendra C. Korgaonkar) H. No. 45, Keni wada, Mapusa, Goa.		5000.00
563	Bardez	N/563 DATED 20/03/2020	GA-03-AH-0028	Smt. Tople Sheetal Tulshidas, Flat G- 2, Souza Complex, Reis Magos, Betim, Bardez Goa.		5000.00
564	Bardez	N/564 DATED 22/04/2020	GA-03-AH-0212	Shri Naik Udai Bharat, H. No. 440/2, Socolwaddo Assagao, Bardez Goa	9405222522	5000.00
565	Bardez	N/565 DATED 24/04/2020	GA-03-W-9747	Shri Shetkar Arjun Rohidas, Flat F-6, Mandovi Residency Housing Board Colony, Alto Porvorim, Bardez Goa.	7057167799	5000.00
566	Tiswadi	N/566 DATED 24/04/2020	GA-08-U-4109	M/s Assma Constructions Pvt Ltd, Sindoor Bldg, 1 st Floor, Behind ICICI Bank, Panaji- Goa.	9850494163	3000.00
567	Pernem	N/567 DATED 24/04/2020	GA-11-T-9993	Shri Korgaonkar Salil Subhash, H. No. 8/45, Mauswada, Bazarpeth, Pernem- Goa.	9637459090	5000.00
568	Bardez	N/568 DATED 06/05/2020	GA-03-AH-0454	Shri Narvekar Deepak Madhukar, H. No. 51/4, Koniwado, Colvale, Bardez Goa.	9890472501	5000.00
569	Bardez	N/569 DATED 07/05/2020	GA-03-AH-0488	Shri Pereira Caitano Manuel, H. No. 833/A, Dandadi, Nerul, Bardez Goa.	9881347754	5000.00
570	Bicholim	N/570 DATED 07/05/2020	GA-04-T-5077	Seema V. Prabhu Khandolkar, H. No. 200/2, Murdiwada, Advalpal, Bicholim Goa.		5000.00
571	Bengaluru	N/571 DATED 07/05/2020	KA-02-AG-2157	Shri R. Balarami Reddy and Company, Mulbery, Hubli Bengaluru.		5000.00
572	Bardez	N/572 DATED 07/05/2020	GA-03-K-0663	Shri Mapsekar Nilesh M, h. No. 226/B, Prabhuwada, Calangute, Bardez Goa.	9822136733	5000.00

573	Salcete	N/573 DATED 07/05/2020	GA-08-U-5473	Muktar Mineral Pvt Ltd, Plot No. B2, Phase La Verna Salcete Goa.		5000.00
574	Karnataka	N/574 DATED 07/05/2020	KA-44-1552	Shri Inamdar Jony, Ward No. 14, Station Road, Behind Saish Masjid, Badikaman Cross, Karnataka.		5000.00
575	Salcete	N/575 DATED 07/05/2020	GA-08-U-5471	Muktar Mineral Pvt Ltd, Plot No. B2, Phase La Verna Salcete Goa.		5000.00
576	Satara	N/576 DATED 07/05/2020	MH-11-AL-0570	Shri Gholap Sunil, Sushma Auto Agro Centre, New Highway, Satara.		5000.00
577	Bijapur	N/577 DATED 07/05/2020	MH-43-U-1604	Shri Shivannagowda Biradar, Mallanagowda, A/p, B. Salaradaji Dis Bijapur.		5000.00
578	Telangana	N/578 DATED 07/05/2020	TS-29-T-4503	KMV Projects Limited, Near Udugupalli, Thungathurthy, Suryapet, Teangana.		5000.00
579	Telangana	N/579 DATED 07/05/2020	TS-29-T-4502	KMV Projects Limited, Near Udugupalli, Thungathurthy, Suryapet, Telangana.		5000.00
580	Salcete	N/580 DATED 07/05/2020	GA-08-V-5475	Muktar Mineral Pvt Ltd, Plot No. B2, B3, Phase La Verna Salcete Goa.		5000.00
581	Salcete	N/581 DATED 07/05/2020	GA-08-V-5479	Muktar Mineral Pvt Ltd, Plot No. B2, B3, Phase La Verna Salcete Goa.		5000.00
582	Bengaluru	N/582 DATED 07/05/2020	KA-02-AG-2166	R. Balarami Reddy and Company, Mulberry Meadows, Sadahalli (V) Kasaba Hobli, Bengaluru.		5000.00
583	Bicholim	N/583 DATED 07/05/2020	GA-01-W-9979	Sindhiya Pawaskar, H. No. 17, Antilpeth, Bicholim Goa.		5000.00
584	Salcete	N584 DATED	GA-08-U-5480	Muktar Minerals Pvt Ltd, Plot No. B2, B3, Phase La Verna, Salcete Goa.		5000.00
585	Bardez	N/585 DATED 13/05/2020	GA-03-AH-8222	Shri Khorjuenkar Ramdas Raghuvir, H. No. 98/7, Bandirwada, Anjuna, Bardez Goa.		5000.00
586	Bardez	N/586 DATED 15/05/2020	GA-04-T-6061	Shri Joshi Gopal Laxman, H. No. 341/4, Shetyewada, Mapusa, Bardez Goa.	9075242625	5000.00

587	Tiswadi	N/587 DATED 15/06/2020	GA-01-T-8062	Shri Shirodkar Rupesh Tulshidas, H. No. 118, Near Zarim, Fontainhas, Mala- Panaji Goa.		5000.00
588	Tiswadi	N/588 DATED 15/06/2020	GA-02-T-7419	Shri Gomes Pedro Lourenco, Flat No. F2, Rudra Complex behind Holy Cross, Bambolim Goa.	9822384112	5000.00
589	Tiswadi	N/589 DATED 30/06/2020	GA-07-F-9002	Shri Kunkolkar Uday Bhaskar, H. No. 81, Oityant, Taleigao, Tiswadi Goa.		5000.00
590	Bardez	N/590 DATED 01/07/2020	GA-01-Z-2201	Shri Harmalkar Rajendra Gajanan, Canca waddo, Kuncholim, Mapusa, Bardez Goa.	9371130131	5000.00
591	Bardez	N/591 DATED 03/07/2020	GA-03-W-4859	Shri Mandrekar Nilesh Vasu, Mokharai wada, Revora, Bardez Goa.	8550925093	5000.00
592	Tiswadi	N/592 DATED 19/10/2020	GA-07-F-9055	Laxmi Civil Engg Services Pvt Ltd, 201, Block -II, Floor Dukle Heaven Tambdi Mati, Taleigao Goa.		
593	Tiswadi	N/593 DATED 6/11/2020	GA-07-F-9034	Shri Clifford Ismael Fialho, Tiswadi Goa.	9822155558	5000.00
594	Tiswadi	N/594 DATED 17/11/2020	GA-07-F-8858	Shri Sudam Naik, Tiswadi Goa.	7875040419	5000.00
595	Pernem	N/595 DATED 23/11/2020	GA-11-T-2100	Shri Vishwesh Pandurang Bhendalkar, nagzar Bhendale Pernem Goa.		5000.00
596	Bardez	N/596 DATED 7/12/2020	GA-03-AH-2221	Abhijit Ajit Tamonkar, Chapora, , Bardez, 180/1, Zor waddo, Chapora Bardez Goa.		5000.00
597	Bardez	N/597 DATED 15/12/2020	GA-03-AH-0507	Sanjay Bharat Naik, H. No. 440/A, Varad Vinayak Temple, Assagao, Bardez Goa.		5000.00
598	Bardez	N/598 DATED 14/01/2021	GA-08-U-3581	Mr. Dabholkar Daji Suresh, H. No. 172-4/1, Vina Niwas, Cuchelim, Mapusa, Bardez Goa.		5000.00
599	Pernem	N/599 DATED 23/02/2021	GA-01-G-7673	Assistant Engineer, SD-I, WDIV, XVII, PHE-N, Pernem Goa.		5000.00
600	Bardez	N/600 DATED 18/03/2021	GA-03-W-6390	Ramdas Tukaram Malvankar, H. No. 62/1, Gongere, Assagao, Bardez- Goa.		5000.00

601	Pernem	N/601 DATED 20/04/2021	GA-11-T-3001	Rajendra Arjun Salgaonkar, H. No. 693, Panshiwada Pernem Goa.		5000.00
602	Bardez	N/602 DATED 20/04/2021	GA-03-AH-1621	Mrs. Subaji Digambar Laximidas, H. No. 85/111/5, Near ITI Peddem, Shetyewasa, Mapusa Municipal Council.		5000.00
603	Bardez	N/603 DATED 24/05/2021	GA-03-W-1959	Smt. Naik Supriya Chandrahas, H. No. 6/92, Khobrawado, Calangute, Bardez Goa.		5000.00
604	Bardez	N/604 DATED 06/07/2021	GA-03-W-5664	Shri Babli Govind Tari, H. No. 640, Bhatcar waddo, Alto Betim, Bardez Goa.		5000.00
605	Bardez	N/605 DATED 18/08/2021	GA-03-AH-1999	Shri Babli Govind Tari, H. No. 640, Bhatcar waddo, Alto Betim, Bardez Goa.		5000.00
606	Bardez	N/608 DATED 29/09/2021	GA-03-AH-1006	Ankita hanumant Naik, H. No. 172, Bairo, Alto, Assagao, Bardez Goa.		7000.00
607	Bardez	N/609 DATED 04/10/2021	GA-03-AH-2131	Mr. Kandolkar Sadanand Pandurang, H. No. 346-B, Uba vaddo ,Near Government Primary School, Salvador-do-Mundo, Betim Goa.		7000.00
608	Bardez	N/610 DATED 27/10/2021	GA-03-AH-1840	Shri Pravin Fati Madgaonkar, H. No. 189, Zorwaddo, Anjuna, Bardez Goa.		7000.00
609	Salcete	N/611 DATED 08/11/2021	GA-08-V-2863	Shri Suresh Madhu Sawant, H. No. 262/B, Camurlim Maina, Curtorlim, Salcete, Bardez Goa.		7000.00
610	Tiswadi	N/612 DATED 10/11/2021	GA-07-T-8078	Shri Zainul Abedin Shaikh, H. No. 74, Tamdi Mati, St. Inez, Panaji Goa.		5000.00
611	Tiswadi	N/613 DATED 02/12/2021	GA-03-W-2421	Shri Drohan Dilip Divkar, H. No. 200, Cardoz waddo, TALIEGAO Goa.	7261961599	6200.00
612	Tiswadi	N/614 DATED 31/01/2022	GA-03-K-9678	Sushila Killedar Mahadev, 14-A, Navelkar Estate, Bainguinim, Old Goa.	9822161898	6000.00
613	Bardez	N/615 DATED 07/04/2022	GA-03-N-2099	Panjikar Tanvi Tulsidas, H. No. 51/B, Podwal, Aldona, Bardez Goa.		6000.00
614	Bardez	N/616 DATED	GA-03-W-9109	Sonsulkar Ramchandra Eknath, H. No. 61/14, Khorlim, Mapusa, Bardez Goa.		7000.00
615	Bardez	N/617 DATED	GA-03-W-9108	Mr. Korgaonkar Rajendra Chandrakant, H.No. 45, Keni Wada, Mapusa Goa 403507	9422417642	7000.00
616	Bardez	N/618 DATED 13/05/2022	GA-03-AH-3895	Parsekar Vivin Vinod, H. No. 1430, Malbar band, Anjuna, Bardez Goa.	9561182585	7000.00

617	Tiswadi	N/619 DATED 13/07/2022	GA-07-F-9126	Smt. Sushma Hari Naik, H. No. 217 Nr. Rukmini Appts, St. Inez, Panaji Tiswadi Goa 403001	7517407915	3000.00
618	Tiswadi	N/620 DATED 13/07/2022	GA-07-F-9125	Smt. Sushma Hari Naik, H. No. 217 Nr. Rukmini Appts, St. Inez, Panaji Tiswadi Goa 403001	7517407915	3000.00
619	Salcete	N/621 DATED 22/07/2022	GA-08-V-5694	M/s. S.B Construction, H. No. 581/4 (GF-S3), Dongrim, Navelim Salcete, South Goa.		5000.00
620	Bardez	N/622 DATED 26/07/2022	GA-03-W-9935	Buddesb Abdulkhadar Husinab, H. No. 195/3, Narayan Devasthan, Verla, Bardez Goa 403510	9552997465	5000.00
621	Bicholim	N/623 DATED 10/10/2022	GA-03-N-0758	Ashish A Farari, H. No. 110, Nanoda Latambarcem, Bicholim Goa 403507		5000.00
622	Bardez	N/624 DATED 15/03/2023	GA-03-AH-9450	Shri Hanumant Naik, H. No. 172, Bairo Alto Assagao, Bardez Goa.	8668740618	5000.00
623	Tiswadi	N/625 DATED 5/06/2023	GA-01-T-9034	Shri Nasir Ismail Khan, H. No. 103/D, Regal Chambers, Boca-de-Vaca, Panaji Goa.	9822155558	5000.00

Div- VI						
1	Bicholim - North	N 410/R 98	GA-01-T-2184	Shri. Vidhyanand Karbotkar, 1350, Deus Bhatwadi, Mayem, Bicholim, Goa 403504	9822319745	0-5000 Lts
2	Bicholim - North	N 320 / R 95	GA-01-U-1805	Smt. Rasika Jaga Gaonkar	8329154166	Above 5000 Lts
3	Bicholim - North	N 1 / R 97	GA-04-T-2431	Smt. Gawas Latika Laxmikan	9850468932	Above 5000 Lts
4	Bicholim - North	N 487 / R 96	GA-04-T-3007	Smt. Gawas Latika Laxmikan	9850468932	Above 5000 Lts
5	Bicholim - North	N 200 / R 93	GA-04-T-1376	Shri. Ranjit Velayudhan Mambully	9823365141	Above 5000 Lts
6	Bicholim - North	N 173 / R 90	GA-01-U-2732	Shri. Laxmikan Vaman Gawas	8007695926	5001 - 10000 Lts
7	Bicholim - North	N 251 / R 89	GA-01-V-3755	Shri. Amol Bhimrao Desai	9518584850	5001 - 10000 Lts
8	Bicholim - North	N 51/ R 87	GA-04-T-3215	Smt. Shubhada Anant Marathe	9158580339	5001 - 10000 Lts
9	Bicholim - North	N 154 / R 107	GA-01-U-0358	Shri. Suryakant Shyamsundar Shiodkar	9765675093	5001 - 10000 Lts
10	Bicholim - North	N 264 / R 77	GA-02-T-6428	Shri. Bhanudas Anant Narvekar	9158580339	5001 - 10000 Lts
11	Bicholim - North	N 396 / R 91	GA-06-T-2114	V.M. Salgaocar & Brother Pvt. Ltd	8788135598	5001- 10000 Lts
12	Bicholim - North	N 379 / R 92	GA-06-T-2229	V.M. Salgaocar & Brother Pvt. Ltd	8788135598	5001- 10000 Lts
13	Bicholim - North	N 138/ R 103	GA-04-T-2556	M/s Sesa Resource Ltd	8322460690	5001- 10000 Lts

14	Bicholim - North	N 477 / R 104	GA-04-T-2555	M/s Sesa Resource Ltd	8322460690	5001- 10000 Lts
15	Bicholim - North	N 157 / R 105	GA-07-F-0130	M/s Sesa Mining Corporation Ltd	9823455926	5001- 10000 Lts
16	Bicholim - North	N 219 / R 106	GA-07-F-1883	M/s Sesa Mining Corporation Ltd	9823455926	5001- 10000 Lts
17	Bicholim - North	N 395 / R 60	GA-06-T-2181	V.M. Salgaocar & Brother Pvt. Ltd	8350755002	5001- 10000 Lts
18	Bicholim - North	N 453 / R 108	GA-01-U-2619	Shri. Vinod Chikanekar		5001- 10000 Lts
19	Bicholim - North	N 445 / R 99	GA-07-1591	Shri. Mahesh Arjun Matonkar, Hno. 1422, Industrial Estate, Bicholim, Goa, 403504	9552080022	Above 5000 Lts
20	Bicholim - North	N 139/ R 102	GA-01-T-6797	M/s Sesa Resource Ltd, Surla Dignem, Bicholim	7038868418	5001- 10000 Lts
21	Bicholim - North	N 327 / R 82	GA-02-T-9006	Shri. Suraj Anant Marathe, Hno. 278, Barazan Navelim	9158580339	5001- 10000 Lts
22	Valpoi Sattari	N 354 / R 94	GA-04-T-9578	Ujwala Gajanand Parab, Gaonkarwada Pissurlem Sattari Valpoi		8000 Ltrs
23	Valpoi Sattari	N 368 / R 100	GA-04-T-3095	Suresh Venkatesh Dessai, Hno. 95, Adval, Sattari, Valpoi	9923483773	10000 Ltrs

DIV- XI						
1	Ponda	56	GA-01-W-5962	Shri. Nilesh Bholu Naik, Mahalwada, Madkai, Ponda Goa.	9823385262	10000 ltr
2	Ponda	57	GA-01-W-6259	Shri. Naresh Bholu Naik, Mahalwada, Madkai, Ponda Goa.	9823385262	10000 ltr
3	Ponda	74	GA-01-W-6962	Shri. Nilesh Bholu Naik, Mahalwada, Madkai, Ponda Goa.	9823385262	10000 ltr
4	Ponda	75	GA-01-T-7181	Smt. Mohini M. Shet, H. No. 864, Durbht, Ponda Goa.	7264085660	12000 ltr
5	Ponda	69	GA-08-U-3882	Mrs. Geeta B. Dessai, Konem, Curti, Mardol, Ponda Goa.	9545384015	10000 ltr
6	Ponda	70	GA-08-U-3885	Mrs. Geeta B. Dessai, Konem, Curti, Mardol, Ponda Goa.	9545384015	10000 ltr
7	Ponda	71	GA-01-T-4262	Mrs. Geeta B. Dessai, Konem, Curti, Mardol, Ponda Goa.	9545384015	10000 ltr
8	Ponda	151	GA-02-V-5530	Shri. Vinod Y samant, H. No. 329, Amshwada, Mardol Goa.	8806454089	12000 ltr
9	Ponda	152	GA-01-Z-1019	Shri. Viraj Y. Samant, H. No. 222, Namaswada, Mardol, Ponda Goa.	8806454089	12000 ltr
10	Ponda	153	GDZ-7462	Shri. Viraj Y. Samant, H. No. 222, Namaswada, Mardol, Ponda Goa.	8806454089	12000 ltr

11	Ponda	154	GA-01-W-5335	Shri. Somnath B. Phadte, H. No. 546, Manaswada, Kundaim, Ponda Goa.	9850075597	10000 ltr
12	Ponda	28	GA-01-W-5110	Shri. Milagres S. Fernandes, H. No. 279/1, Khandepar, Ponda Goa.	9923749059	10000 ltr
13	Ponda	162	GA-01-W-6463	Shri. Gokuldas J. Sawant, H. No. 228, Manaswada, Kundaim, Ponda Goa.	9923614568	10000 ltr
14	Ponda	161	GA-01-Z-4818	Shri. Gokuldas J. Sawant, H. No. 228, Manaswada, Kundaim, Ponda Goa.	9923614568	10000 ltr
15	Ponda	167	GA-02-T-7419	Shri. Pramod C. Phadte, H. No. 760, Phadte Vaddo, Kundaim, Ponda Goa.	9049208369	10000 ltr
16	Ponda	170	GA-05-T-1712	Shri. Rima Ramdas Naik Gaonkar, H. No. 321, Naikkwada, Bhoma Ponda Goa.	9420897890	10000 ltr
17	Ponda	171	GA-03-T-7121	Shri. Nilesh G. Naik, Flat No. 4, Perqul, Quelem, Ponda Goa.	9823767461	6000 ltr
18	Ponda	172	GA-05-T-0735	Shri. Nilesh G. Naik, Flat No. 4, Perqul, Quelem, Ponda Goa.	9823767461	6000 ltr
19	Ponda	176	GA-02-T-8227	Shri. Santosh Datta Gaude, Haddiye-Wada, Mangueshi, Ponda Goa.	9923542128	12000 ltr
20	Ponda	177	GA-01-W-7164	M/S. Sunil Associates, Puja Apartment, 1st,Floor,Dhavali, Ponda Goa.	9545473771	10000 ltr
21	Ponda	178	GA-01-W-8164	Mr. Sunil G. Naik, H.No. 53, Tarvelem, Shiroda, Ponda Goa.	9545473771	10000ltr
22	Ponda	179	GA-05-T-5164	Mr. Sunil G. Naik, H.No. 53, Tarvelem, Shiroda, Ponda Goa.	9545473771	10000 ltr
23	Ponda	180	GA-01-Z-2715	Shri. Vishram Y. Samant, H. No. 222, Cuncollem, Mardol, Ponda Goa.	8806454089	10000 ltr
24	Ponda	188	GA-01-U-9084	Smt. Vaibhavi V. Mardolkar, H. No. 302, Near Mahalasa Temple, Mardol, Ponda Goa.	9421156526	10000 ltr
25	Ponda	189	GA-01-W-8384	Shri. Virendra S. Mardolkar, H. No. 302, Near Mahalasa Temple, Mardol, Ponda Goa.	9421156526	10000 ltr
26	Ponda	29	GA-02-T-9449	Shri. Rukmakar Tulshidas Naik, H. No. 402, Adpai, Durbhat, Ponda Goa.	9823383548	12000 ltr
27	Ponda	194	GA-01-W-5050	Shri. Virendra S. Mardolkar, H. No. 302, Near Mahalasa Temple, Mardol, Ponda Goa.	9421156526	10000 ltr
28	Ponda	199	GA-01-U-2856	Shri. Mulla Zameer, H. No. 07, Antruj Nagar, Ponda Goa.	9764676482	12000 ltr
29	Ponda	200	GA-01-W-5892	Shri. Mulla Zameer, H. No. 07, Antruj Nagar, Ponda Goa.	9764676482	20000 ltr
30	Ponda	203	GDS-9555	The Executive Emgineer, WDIII, PHE, PWD, St. Inez, Panaji Goa.	9325638206	10000 ltr

31	Ponda	207	GA-01-W-9191	Smt. Vaibhavi V. Mardolkar, H. No. 302, Near Mahalasa Temple, Mardol, Ponda Goa.	9421156526	10000 ltr
32	Ponda	208	GA-01-W-6037	M/S. R.B.S. Candiaparcarr, Anant Smruti, Behind Post Office, Ponda Goa.	9860454952	4000 ltr
33	Ponda	214	GA-01-W-7322	Shri. Sandip Nikanth Nigalye, C/O. Raj Housing Development Pvt. Ltd, S-1, Pai House above Goa Urban Co-op Bank, Ponda Goa.		4000 ltr
34	Ponda	219	GA-07-G-0428	Range Forest Officer Social Forestry, Forest division complex, Santa Cruz, Ponda Goa.	7798986188	36000 ltr
35	Ponda	217	GA-01-W-6555	C.M.A. Shafi, Kudroli, Builders, Kalembika Tower (gateway), Tisk, Ponda Goa.	8698585555	5000 ltr
36	Ponda	218	GA-01-W-6931	C.M.A. Shafi, Kudroli, Builders, Kalembika Tower (gateway), Tisk, Ponda Goa.	8698585555	5000 ltr
37	Ponda	221	GA-01-W-8084	Shri. Virendra S. Mardolkar, H. No. 302, Near Mahalasa Temple, Mardol, Ponda Goa.	9421156526	10000 ltr
38	Ponda	225	GA-01-T-7721	Shri. Akhil Arun Naik, Behind Dr. Shirsat Residence Tisk, Ponda Goa.	9822120929	10000 ltr
39	Ponda	243	GA-03-T-6554	Shri. Purshottam Budu Naik, H. No. 167/A, Undir, Bandora, Ponda Goa.	9822986813	6000 ltr
40	Ponda	245	GA-02-T-8210	Shri. Manohar P. Khandeparkar, H. No. 175/21(1), Shantinagar, Ponda Goa.	9823753589	6000 ltr
41	Ponda	244	GA-07-G-0821	Range Forest Officer Social Forestry, Usgao, Ponda Goa.	7798536478	24000 ltr
42	Ponda	250	GA-08-V-0672	Shri. Ayyub Hmishuddin Mohammed, Near Sai Service, Curti, Ponda Goa.		4000 ltr
43	Ponda	251	GA-08-V-0583	Shri. Ayyub Hmishuddin Mohammed, Near Sai Service, Curti, Ponda Goa.		4000 ltr
44	Ponda	262	GA-01-W-8184	Shri. Virendra S. Mardolkar, H. No. 302, Near Mahalasa Temple, Mardol, Ponda Goa.	9421156526	10000 ltr
45	Ponda	270	GA-03-T-3917	Smt. Trupti Tulshidas Gaonkar, H. No. 422, Opa Wada Khandepar, Ponda Goa.	9823959876	6000 ltr
46	Ponda	89	GDS-6652	Shri. Arun Chandrakant Gauns, Tisk, Usgao, Ponda Goa.	9423213866	10000 ltr
47	Ponda	271	GA-02-V-7311	Shri. Mohandas Manohat Naik, H. No. 230, Manaswada Kundaime, Ponda Goa.	9822981039	10000 ltr
48	Ponda	281	GA-01-T-6522	Shri. Sidharth Sawant, H. No. 229, Manaswada, Kundaime, Ponda Goa.	9823799763	10000 ltr
49	Ponda	285	GA-05-T-3209	Shri. Shashikant K. Gaonkar, H. No. 15, Near Temple of Shri. Mahadev Tambdi Surla, Dharbandora Goa.	7264085517	4000 ltr
50	Ponda	284	GA-01-W-0405	Shri. K. K. Sreedharan, R/o. Block No. 3, Dhavlikar Bldg, Dhavlim, Ponda Goa.	8698869337	3000 ltr

51	Ponda	290	GA-02-V-9757	Shri. Chandrakant V. Prabhu, H. No. 169/16-1, Shantinagar, Ponda Goa.	9637864168	10000 ltr
52	Ponda	291	GA-02-V-5386	Shri. Mohamad Said Khan, H. No. 139/3, Tolem, Durgabhat, Ponda Goa.	9822191486	10000 ltr
53	Ponda	295	GA-05-T-4616	Shri. Vrindavan Engineer & Contractors (India) Pvt. Ltd, AS-7, Marvil Apartment, St. Cruz, Ponda Goa.	8698869337	7000 ltr
54	Ponda	292	GDZ-6828	Shri. Shailesh Kanta Sawant, H. No. 622, Pursabhat, Manaswada, Kundaim, Ponda Goa.	9823799763	10000 ltr
55	Ponda	300	GA-02-T-6336	Shri. Tulshidas K. Sawant, Manaswada, Kundaim, Ponda Goa.	9823799763	12000 ltr
56	Ponda	302	GA-05-T-1067	Shri. Shubhada Prakash Naik, H. No. 403/2, Anant Sai, Mahalwada, Savoi Verem, Ponda Goa.	9422445435	6000 ltr
57	Ponda	309	GA-05-T-0724	Shri. Suchit A. Jambhale, H. No. 102, Avantinagar, Tisk, Usgao, Ponda Goa.	9823141049	8000 ltr
58	Ponda	90	GA-02-T-9833	Shri. Arun Chandrakant Gauns, Tisk, Usgao, Ponda Goa.	9423213866	10000 ltr
59	Ponda	316	GA-01-W-5759	Shri. Nilesh Gurudas Naik, Perigol, Kavlem, Ponda Goa.	9823767461	5000 ltr
60	Ponda	298	GA-01-W-1193	Shri. Ajit K. Bagli, H. No. 30/F, Nr. Govt High School, Vasco-da-Gama, Goa.	8055535599	10000 ltr
61	Ponda	303	GA-01-W-5366	Shri. Viraj Y. Samant, H. No. 222, Namaswada, Mardol, Ponda Goa.	8806454089	12000 ltr
62	Ponda	320	GA-01-V-7300	Shri. Sidharth Sawant, H. No. 229, Manaswada, Kundaim, Ponda Goa.	9823799763	10000 ltr
63	Ponda	321	GA-06-T-2928	Smt. Nehali N. Naik, H. No. 204, Mahmohan Residency, Perigol, Quela, Ponda Goa.	9823767461	5000 ltr
64	Ponda	323	GA-05-T-7037	M/S. R.B.S. Candiaparcas, Anant Smruti, Behind Post Office, Ponda Goa.	9860454952	6000 ltr
65	Ponda	331	GA-06-T-1987	Shri. Mahesh Gurudas Naik, H. No. 143, Querim, Satode, Ponda Goa.	9822767461	6000 ltr
66	Ponda	332	GA-01-T-1711	Shri. Shailesh Kanta Sawant, H. No. 622, Pursabhat, Manaswada, Kundaim, Ponda Goa.	9823799763	10000 ltr
67	Ponda	333	GA-05-T-5129	Shri. Viraj Y. Samant, H. No. 222, Namaswada, Mardol, Ponda Goa.	8806454089	12000 ltr
68	Ponda	334	GA-03-T-0999	Smt. Geeta B. Dessai, H. No. 1623, Konem, Priol, Mardol, Ponda Goa.	9545384015	10000 ltr
69	Ponda	335	GA-03-W-6303	Shri. Dinesh G. Keni, H. No. G-5, Valley Mist Residency, Pundalik Nagar, Alto-Porvorim, Goa.		6000 ltr
70	Ponda	336	GA-08-V-2052	Shri. Yashwant Balkrishna Naik, Flat S-2, Vanashvi Apartments, Behind Sanjay Enterprises, Aquem, Margao Goa.	7387410082	5000 ltr

71	Ponda	337	GA-05-T-5327	Shri. Amey Arun Naik, H. NO. 6/188/15, Behind Dr. Shirsat Residence, St. Cruz. Ponda Goa.	9822981039	10000 ltr
72	Ponda	340	GA-05-T-5398	Shri. Akhil Arun Naik, Behind Dr. Shirsat Residence Tisk, Ponda Goa.	9822120929	10000 ltr
73	Ponda	310	GA-02-W-5892	Shri. Mulla Zameer, H. No. 07, Antruj Nagar, Ponda Goa.	9764676482	20000 ltr
74	Ponda	342	GA-08-T-5167	Shri. Viraj Y. Samant, H. No. 222, Namaswada, Mardol, Ponda Goa.	88066454089	12000 ltr
75	Ponda	343	GA-05-T-4755	Jog Construction Company Pvt Ltd, 8, Parijat Housing Society, Khadpaband Ponda Goa.	9689364455	6000 ltr
76	Ponda	345	GA-05-T-5553	Shri. Dhiraj Damodar Naik, H. No. 409, Bye Pass Road, Dhavli, Ponda Goa.	9637415767	8000 ltr
77	Ponda	344	GA-01-W-8239	Shri. Anant S. Naik, H. No. 1062, AdanWada Madkai, Ponda Goa.	8208710013	9000 ltr
78	Ponda	346	GA-01-U-7477	Shri. Tulshidas Narayan Prabhu, H. No. 108, Gaonkar Wada, Ponda Goa.	98212981039	6000 ltr
79	Ponda	347	GA-01-W-9198	Shri. Pradip Chandrakant Devidas, Flat No. 9/10, Laxmikrupa Hsg Society, Near Musafir Hotel Yeshwant Nagar, Tisk, Ponda Goa.	9923696347	12000 ltr
80	Ponda	348	GA-05-U-4448	Shri. Amar Kanta Sawant, Parodkar Appartment Building No. 3, F-6 Near Parodkar TVS Showroom, Sainagar, Durgabhat, Ponda Goa.	9822981039	8000 ltr
81	Ponda	349	GA-05-T-0660	Shri. Dhiraj Damodar Naik, H. No. 409, Bye Pass Road, Dhavli, Ponda Goa.	8817769999	10000 ltr
82	Ponda	350	GA-01-W-6635	Shri. Gurunath Sonu Naik, H. No. 2033, Dabolim, Shiroda, Ponda Goa.	9850631455	10000 ltr
83	Ponda	351	GA-05-T-1607	Shri. Bhalchandra Gurudas Naik, H. No. 133, Near Primary School, Satode-Keri, Ponda Goa.	8805252203	6000 ltr
84	Ponda	352	GA-06-T-4544	Shri. Chittaranjan Pundalik Prabhu, H. No. 125-A, Gaonkar Wada, Usgao, Ponda Goa.	9923522514	5000 ltr
85	Ponda	353	GA-05-T-4825	Shri. Abdul Khader K. Ibrahim, H. No. 37, Nagamasjid, Curti, Ponda Goa.	8893770055	4000 ltr
86	Ponda	354	GA-11-T-0099	Shri. Suchit A. Jambhale, H. No. 102, Avantinagar, Tisk, Usgao, Ponda Goa.	9823141049	10000 ltr
87	Ponda	355	GA-05-T-6746	Baba Water Supply, C/o. Jayesh Bholu Naik, H. No. 345, Mahalwada, Madkai, Ponda Goa.	9359006989	12000 ltr
88	Ponda	356	GA-01-T-1508	Shri. Mehboob Ali Kalmani, H. No. 30/3, Near Antruz Nagar, Bazarmol, Curti, Ponda Goa.	9823283494	8000 ltr
89	Ponda	357	GA-01-W-5654	Shri. Ekbal Allaudin Mulla, H. No. 532, Shirfod, Curchorem, Quepem Goa	8668749598	8000 ltr
90	Canacona	249	GA-02-V-5191	Shekar M.Naik, Kindlebag Rajbag, Canacona-Goa	7798554121	12,000 lts

91	Canacona	206	GA-01-T-5859	Supriya S. Sawal, Q.No D-3 CHC, Sheller, Canacona	9673731647	12,000 lts
92	Canacona	305	GA-01-T-1584	Supriya S. Sawal, Q.No D-3 CHC, Sheller, Canacona	9673731647	12,000 lts
93	Canacona	311	GA-01-Z-3330	Dipti J.Gaonkar, H. No 1612, Nagarcem, Cana	982262815	12,000 lts
94	Canacona	212	GA-01-T-6288	Shri. Jaideep S. Gaonkar, H. No. 1612, Nagorcem Canacona Goa.	9822137877	10,000 ltr

DIV- XII						
1	Sanguem	140	Ga-09-U-8998	Shri. Rajesh A.S. Dessai, H.No. 58-A, Ambendak, Sanvordem, Sanguem-Goa.	9049577711	8000
2	Sanguem	141	GA-02-U-8846	Shri. Rajesh A.S. Dessai, H.No. 58-A, Ambendak, Sanvordem, Sanguem-Goa.	9049577711	8000
3	Sanguem	142	GA-02-T-6013	Shri. Sidhanath K. Naik, H.No. 995, Ambendak, Sanvordem, Sanguem-Goa.	9823951724	8000
4	Sanguem	143	GDT - 8427	Shri. Mohan V. Naik, H.No. 995, Ambendak, Sanvordem, Sanguem-Goa.	7507959400	8000
5	Sanguem	139	GA-09-U-8824	Shri. Jose Domingo Fernandes, Ambendak, Sanvordem, Sanguem-Goa.	8275385524	8000
6	Sanguem	155	GDZ - 7277	Shri. Padmakar R. Patil, H.No. 900, Cuddegal, Fomento Mine, Sanvordem, Sanguem-Goa.	9657626348	8000
7	Sanguem	95	GDZ - 9074	Executive Engineer, Works Division IX, PWD, Fatorda - Margao - Goa.	8352741993	12000
	Sanguem	182	GDZ-9075	Executive Engineer, Works Division IX, PWD, Fatorda - Margao - Goa.	9850458744	12000
8	Sanguem		GDT -8515	Shri. Naguesh V. Naik Ranchwai		
9	Sanguem	72	GA-08-T-5761	Shri. Yoganand V. Naik, H.No. 116, Dhadem, Sanvordem, Sanguem - Goa	9850477461	10000
10	Sanguem	186	GA-02-T-6247	Shri. Vithu. Sadashiv Virnodkar, H.No. 401, Tisk, Sanvordem, Sanvordem - Goa.	9049816572	10000
11	Sanguem	163	GA-01-W-6635	Shri. Gurunath Sonu Naik, H.No. 2033, Dabolim, Shiroda, Ponda- Goa.	985631455	12000
12	Sanguem	164	GA-01-W-5654	Shri. Gurunath Sonu Naik, H.No. 2033, Dabolim, Shiroda, Ponda- Goa.	9850631455	12000
13	Sanguem	236	GA-02-T-6295	Smt. Vishaka V. Naik, H.No. 07, Ambeudak, Sanvordem, Sanguem - Goa.	8806963195	8000
14	Sanguem	248	GDU- 4611	Shri. Husseinbi M. Inchal, Ambeudak, Sanvordem, Sanguem - Goa.	9049467632	10000
15	Sanguem	247	GDS- 6723	Shri. Deepak Raikar , Ambeudak, Sanvordem, Sanguem - Goa.	9637721052	3000
16	Sanguem	256	GA-01-W-5056	Smt. Surekha S. Sawardekar, H.No. 456, Baagwada, Sanvordem, - Goa.	9420688200	8000

17	Sanguem	257	GA-02-U-8843	Shri. Nilesh Tulsidas Naik, H.No. 55, Dhadem, Snvordem , Sanguem - Goa.	982285315	8000
18	Sanguem	331	GA-08-U-6446	Infrastructure Logistic, Pvt. Ltd, Guelim E Goval, Mines Pissuelem, Sattari, North- Goa, Valpoi- Goa.	8308017979	8000
19	Sanguem	332	GA-04-T-3852	Infrastructure Logistic, Pvt. Ltd, Guelim E Goval, Mines Pissuelem, Sattari, North- Goa, Valpoi- Goa.	8308017979	8000
20	Sanguem	525	GA-01-F-7622	Minescape Minerals Private Limited, H.No. 12/69/3,1 st Floor opposite Govinda building, M.G. road, Panaji- Goa.	7030912301	12000
21	Sanguem	507	GA-01-F-8428	Minescape& Kadar Ores Private Limited, H.No. 12/69/3,1 st Floor opposite Govinda building, M.G. road, Panaji- Goa.	7030912301	12000
	Sanguem	127	GA-09-U-3013	Shri. Sadanand Vithu Virnodkar, H.No. 197, Tony Nagar Sanvordem - Goa.	7030689735	10000
	Sanguem	277	GA-08-U-2021	M/s Greater Ferro-Met (Sociedade de Tomento Industrail Pvt. Ltd) Margao - Goa.	8308017979	15000
	Sanguem	114	GA-01-T-9428	M/s Sesa Sterlite Limited, Codli Mine P.O. Kirlapal,Dabal Sanguem	9158883489	6000
	Sanguem	1	GA-08-V-7226	Ultracon Construction PVT. Ltd, H.No. 37/A, Dicarpale, Navelim, Salcete, Goa.	9822155311	5000
22	Dharbandora	90	GA-02-T-9833	Shri.Arun.C.Gaun's,Tisk-Usgao,Ponda-Goa.	9423213866	10000
23	Dharbandora	89	GDS - 6652	Shri.Arun.C.Gaun's,Tisk-Usgao,Ponda-Goa.	9423213866	10000
24	Dharbandora	181	GA-01-W-5084	Shri. Pundalik D. Prabhu, H.No. 125, Gaonkarwada, Usgao Ponda - Goa.		10000
25	Dharbandora	183	GA-02-T-9140	Shri. Uday B. Sahakari, H.No. 252, Bimbolwada, Shigao, Collem, Dharbandora-Goa.	9423058101	5000
26	Dharbandora	215	GA-09-T-5110	Shri.Aniketh.A.Dessai,H.No.98/1,Vansai,Shigao,Sanguem-Goa.	8806727830	
27	Dharbandora	213	GA-01-V-1408	Shri.Prakash Pandhari Dessai,H.No.98/1,Vansai,Shigao,Sanguem-Goa.	8275383851	8000
28	Dharbandora	238	GA-02-T-6816	Sri. Vishnu Gopal Dessai, H.No. 199, Vansai, Shigao, Collem-Goa.	9422814343	8000
29	Dharbandora	241	GA-02-V-7328	Shri. Narayan R. Dessai, H.No. 101/1, Vansaiwada, Shigao, Collem-Goa.	9923915481	8000
30	Dharbandora	258	GA-01-w-7571	Shri. Vidyasagar N. Patil, H.No. 334, Markani-Bhandol. Kirlapal, Dabal, Dharbandora-Goa.	9420685803	8000
31	Dharbandora	267	GA-02-T-6513	Smt. Sulochana S.Dessai, H.No. 97, Vansariwada Shigao Dharbandora - Goa	8506727830	8000
32	Dharbandora	266	GA-04-T-3852	Infrastructure Logistic, Pvt. Ltd, Guelim E Goval, Mines Pissuelem, Sattari, North- Goa, Valpoi- Goa.	8322730651	8000

33	Dharbandora	265	GA-04-T-4917	Infrastructure Logistic, Pvt. Ltd, Guelim E Goval, Mines Pissuelem, Sattari, North- Goa, Valpoi- Goa.	8322730651	8000
34	Dharbandora	268	GA-02-T-5962	Shri. Aniketh A. Dessai, H.No. 98/1, Vansaiwada, Shigao Collem, Dharbandora -Goa	8806727830	8000
35	Dharbandora	393	GA-02-V-6432	M/s Salgaocar and brother Ltd, house Salgaocar off Dr. Franciscd Luis Gomes road, Vasco-Da-Gama.	8390755002	8000
36	Dharbandora	114	GA-01-T-9478	M/s Vedanta Limited, Codli mine, P.O. Kirlapal Dabal Goa.	967969053	5675
37	Dharbandora	115	GA-01-T-9671	M/s Vedanta Limited, Codli mine, P.O. Kirlapal Dabal Goa.	967969053	5675
39	Dharbandora	312	GA-01-U-0257	Shri. Sanyukta V.Patil, H.No. 146, Kirlapal Dabal Dharbandora - Goa	9420685803	8000
40	Dharbandora	313	GA-02-U-9197	Shri. Sanyukta V.Patil, H.No. 146, Kirlapal Dabal Dharbandora - Goa	9420685803	8000
41	Dharbandora	328	GA-02-T-6570	Shr. Ashok Shankar Naik, H.No. 475, Devlemol Campal Curchorem - Goa	9850052397	8000
42	Dharbandora	330	GA-09-T-5418	Shr. Ashok Shankar Naik, H.No. 475, Devlemol Campal Curchorem - Goa	9850052397	8000
43	Quepem	99	GDS- 3626	Shri. Rohidas Hari Vasta, H.No. 598, Shrifod, Curchorem Goa.	9158004810	2500
44	Quepem	126	GDZ-5286	M/s.Agarwal Minerals Goa Pvt,Ltd,Anand Bhavan Station Road Margao-Goa	9168107863	6000
45	Quepem	125	GA-08-T-5169	M/s.Agarwal Minerals Goa Pvt,Ltd,Anand Bhavan Station Road Margao-Goa	9168107863	8000
46	Quepem	187	GDZ - 5656	Shri. Vinayak Vithu Vinodkar, H. No. 197, Tony Nagar, Sanvordem - Sanguem - Goa	9049816572	10000
47	Quepem	261	GA-02-T- 7767	Shri. Prahar P. Sanvordekar, H.No. 31, Raywada, Sanvordem - Goa.	9271674096	6000
48	Quepem	301	GA-01-W-6389	Shri. Prahar P. Sanvordekar, H.No. 31, Raywada, Sanvordem - Goa.	9271674096	6000

EE XIII						
1	Salcete	12	GA-01-Z-4900	Shri. Romeo Jose Quadros, H. no. 12, Gounlloy, Nuvem, Salcete-Goa.	9921840009	10.00
2	Salcete	13	GA-02-T-8765	Shri. Andrew Quadros, H. no. 12, Gounlloy, Nuvem, Salcete-Goa.	9921840009	10.00
3	Salcete	14	GA-01-W-0182	Shri. Andrew Quadros, H. no. 12, Gounlloy, Nuvem, Salcete-Goa.	9921840009	10.00
4	Salcete	15	GA-02-U-6525	M/s. Kurtar Real Estates, 322-A, Kurtarkar Tower, Malbhat, Margao, Salcete-Goa.	9822131505	5.00

5	Salcete	16	GA-08-U-3676	Shri. Gil Augusto Tome Fernandes, H. No. 454, Opp. Fish Market, Pirni, Nagoa, Verna, Salcete-Goa.	9822382940	5.00
6	Salcete	17	GA-02-U-5997	Shri. Gil Augusto Tome Fernandes, H. No. 454, Opp. Fish Market, Pirni, Nagoa, Verna, Salcete-Goa.	9822382940	10.00
7	Salcete	18	GA-08-T-5567	M/s.Sapana Real Estates, Nau House, V. V. Road, P.o Box 125, Margao, Salcete-Goa.	8550998361	6.00
8	Salcete	19	GDZ - 6816	M/s. Krishna Nanu Naik & Son's, Nau House, V. V. Road, P.o Box 125, Margao, Salcete-Goa.	8550998361	6.00
9	Salcete	20	GA-08-U-7151	M/s. Nanu Estates pvt. Ltd., Nau House, V. V. Road, P.o Box 125, Margao, Salcete-Goa.	8550998361	6.00
10	Salcete	21	GA-08-V-2829	Smt. Claudina Eufernia Correia, H. No. 377/A, Monddo, Benaulim, Salcete-Goa.	9270143696	10.00
11	Salcete	25	GA-08-V-1393	Smt. Claudina Eufernia Correia, H. No. 377/A, Monddo, Benaulim, Salcete-Goa.	9270143696	4.00
12	Salcete	26	GA-08-U-6877	Smt. Claudina Eufernia Correia, H. No. 377/A, Monddo, Benaulim, Salcete-Goa.	9270143696	10.00
13	Salcete	29	GA-03-T-7230	Shri. Afroz Banu H. No. 485, Povacao, Verna, Salcete-Goa.	9923489354	10.00
14	Salcete	30	GA-08-U-2406	Shri. Abdul Razak Umar Sayed, H. No. 485, Povacao, Verna, Salcete-Goa.	9923489354	5.00
15	Salcete	31	GA-01-W-7135	Shri. Abdul Razak Umar Sayed, H. No. 485, Povacao, Verna, Salcete-Goa.	9923489354	10.00
16	Salcete	32	GA-06-T-6480	Shri. Romeu Dourado, H. No. 504, Mungul., Grande, Margao Salcete-Goa.	8830136076	6.00
17	Salcete	33	GA-08-U-2052	Shri. Romeu Dourado, H. No. 504, Mungul., Grande, Margao Salcete-Goa.	8830136076	6.00
18	Salcete	34	GA-01-T-7044	Shri. Antonio Luis Cruz, H. No. 17/B, Castle Vaddo, Nagoa, Salcete-Goa.	9325335715	10.00
19	Salcete	35	GA-08-V-0826	Shri. Antonio Luis Cruz, H. No. 17/B, Castle Vaddo, Nagoa, Salcete-Goa.	9325335715	10.00
20	Salcete	36	GA-06-T-1269	Shri. Antonio Luis Cruz, H. No. 17/B, Castle Vaddo, Nagoa, Salcete-Goa.	9325335715	10.00
21	Salcete	44	GA-08-T-5683	Shri. Gurudas D. Borkar, H. No. 617, Gawaliwada, Fatorda, Margao, Salcete-Goa.	9422447525	5.00
22	Salcete	46	GA-08-V-3580	Smt. Sharmila Rosy Quadros D'Cunha, H. No. I-E, Block - C, St. Andrew Residency, Opp. KTC Bus Stand, Vasco-da-Gama, Goa.	9326113915	20.00
23	Salcete	47	GA-05-T-8138	Shri. Ernesto Mariano D'Cunha, IE, Block-C, St. Andrew RTesidency, Opp. K.T.C Bus Stand, Vasco-da-Gama, Mormugao-Goa.	9326113915	10.00

24	Salcete	49	GA-02-T-9708	Shri. Jeston Miranda, H. No. 115, Naikbhat, Sao Jose de Areal, Salcete-Goa	9902348386	10.00
25	Salcete	50	GA-02-T-8177	Shri. Jeston Miranda, H. No. 115, Naikbhat, Sao Jose de Areal, Salcete-Goa	9902348386	10.00
26	Salcete	51	GA-06-T-2978	Shri. Francisco Barreto, H.No. 169, Church Street, cortalim, Mormugao-Goa.	9822181606	6.00
27	Salcete	52	GA-03-T-8778	Shri. Francisco Barreto, H.No. 169, Church Street, cortalim, Mormugao-Goa.	9822181606	6.00
28	Salcete	54	GA-02-V-9909	Shri. Altaf Umar Sayed, H. No. 485, Povacao, Verna, Salcete-Goa.	9923489354	10.00
29	Salcete	55	GA-02-T-9125	Shri. Altaf Umar Sayed, H. No. 485, Povacao, Verna, Salcete-Goa.	9923489354	10.00
30	Salcete	56	GA-02-V-8118	Shri. Altaf Umar Sayed, H. No. 485, Povacao, Verna, Salcete-Goa.	9923489354	10.00
31	Salcete	57	GA-08-U-6706	Shri. Semillo D'Souza, H. No. 206, Arlem, Raia, Salcete-Goa.	9763554885	5.00
32	Salcete	58	GA-08-V-1623	Shri. Ivon Azavedo, H, No. 1883, Belathrmb, Cuncolim, Salcete-Goa.	8698462605	15.00
33	Salcete	59	GA-08-U-0469	Shri. Ivon Azavedo, H, No. 1883, Belathrmb, Cuncolim, Salcete-Goa.	8698462605	15.00
34	Salcete	60	GA-08-U-5076	Shri. Gurudas Dharmu Borkar, H. No. 617, Gawaliwada, Fatorda, Salcete-Goa.	9422447525	9.99
35	Salcete	61	GA-05-T-1641	Shri. Gurudas Dharmu Borkar, H. No. 617, Gawaliwada, Fatorda, Salcete-Goa.	9422447525	10.00
36	Salcete	62	GA-02-U-5093	Shri. Gurudas Dharmu Borkar, H. No. 617, Gawaliwada, Fatorda, Salcete-Goa.	9422447525	10.00
37	Salcete	63	GA-09-U-8031	Shri. Gurudas Dharmu Borkar, H. No. 617, Gawaliwada, Fatorda, Salcete-Goa.	9422447525	10.00
38	Salcete	64	GA-06-T-8899	Shri. Selson D'Cunha, H. No. 1983/B, Masconim, Cuncolim, Salcete-Goa.	9850785613	10.00
39	Salcete	65	GA-02-T-8986	Shri. Selson D'Cunha, H. No. 1983/B, Masconim, Cuncolim, Salcete-Goa.	9850785613	10.00
40	Mormugao	1	GA-02-V-7514	The Chairman, Mormugao Port Trust, Main Administrative office, Headland, Sada, Mormugao-Goa.	9422641444	10.00
41	Mormugao	2	GA-06-T-0486	The Chairman, Mormugao Port Trust, Main Administrative office, Headland, Sada, Mormugao-Goa.	9422641444	10.00
42	Mormugao	3	GA-06-T-1073	Smt. Jasiya Shafeer, H. No. 86/1-22, Mahalaxmi Residency, Behind Kala Bhawan, Zuarinagar, Mormugao-Goa.	9158251115	10.00
43	Mormugao	4	GA-08-U-9939	Shri. Kadar Mohammed Padinharail, H. No. 174/1-A D-2, Zuarinagar, Mormugao-Goa.	9158251115	10.00

44	Mormugao	5	GA-02-V-7026	M/s. Popular Construction Company, H.No. 109, Chicalim,, Mormugao-Goa.	9822180866	10.00
45	Mormugao	6	GA-06-T-0217	M/s. Popular Construction Company, H.No. 109, Chicalim,, Mormugao-Goa.	9822180866	10.00
46	Mormugao	7	GA-06-T-0425	Shri. Everton Vales & Smt. Ava Maria Vales , H. No. 240, Opp. Naval Store depot, Alto-dabolim, Mormugao-Goa.	9822130524	10.00
47	Mormugao	8	GA-02-V-5050	Shri. Everton Vales & Smt. Ava Maria Vales , H. No. 240, Opp. Naval Store depot, Alto-dabolim, Mormugao-Goa.	9822130524	10.00
48	Mormugao	9	GDS - 6983	Smt. Ava Maria Vales & Shri. Everton Vales, H. No. 240, Opp. Naval Store depot, Alto-dabolim, Mormugao-Goa.	9822130524	10.00
49	Mormugao	10	GA-02-V-5520	Smt. Ava Maria Vales & Shri. Everton Vales, H. No. 240, Opp. Naval Store depot, Alto-dabolim, Mormugao-Goa.	9822130524	10.00
50	Mormugao	11	GA-02-V-5526	Smt. Ava Maria Vales & Shri. Everton Vales, H. No. 240, Opp. Naval Store depot, Alto-dabolim, Mormugao-Goa.	9822130524	10.00
51	Mormugao	22	GA-06-T-4480	Smt. Eliza Pereira, H. No. 250, Chicalim, Vasco, Mormugao-Goa	9422059684	6.00
52	Mormugao	23	GA-06-T-5480	Smt. Eliza Pereira, H. No. 250, Chicalim, Vasco, Mormugao-Goa	9422059684	6.00
53	Mormugao	24	GA-06-T-7480	Smt. Eliza Pereira, H. No. 250, Chicalim, Vasco, Mormugao-Goa	9422059684	6.00
54	Mormugao	27	GA-08-V-1035	Shri. Ernesto Mariano D'Cunha, IE, Block-C, St. Andrew R Tesidency, Opp. K.T.C Bus Stand, Vasco-da-Gama, Mormugao-Goa.	9326113915	10.00
55	Mormugao	28	GA-03-T-1199	Shri. Ernesto Mariano D'Cunha, IE, Block-C, St. Andrew Residency, Opp. K.T.C Bus Stand, Vasco-da-Gama, Mormugao-Goa.	9326113915	10.0
56	Mormugao	37	GA-06-T-8565	Smt. Nisha Sushant Patekar, H. No. 288, Jyoti Niwas, New Vaddem, Mormugao-Goa.	9422445791	5.00
57	Mormugao	38	GA-06-T-2502	Shri. Sunil B. Naik, H. No. 200, Nr. Bharat Gas Godown, Assoi, Chicalim, Mormugao-Goa.	9762772692	6.00
58	Mormugao	39	GA-06-T-7145	Shri. Sunil B. Naik, H. No. 200, Nr. Bharat Gas Godown, Assoi, Chicalim, Mormugao-Goa.	9762772692	8.00
59	Mormugao	40	GA-06-T-3058	Smt. Suvarna Sunil Naik, H. No. 200, Nr. Bharat Gas Godown, Assoi, Chicalim, Mormugao-Goa.	9130617132	6.00

60	Mormugao	41	GA-02-V-9955	Shri. Santosh Gopalkrishna Pai, H. No. 148, Padmavati Niwas, Parongwadi, Baina, Vasco-da-Gama, Mormugao-Goa.	9762286854	6.00
61	Mormugao	42	GA-02-V-7028	Shri. Santosh Gopalkrishna Pai, H. No. 148, Padmavati Niwas, Parongwadi, Baina, Vasco-da-Gama, Mormugao-Goa.	9762286854	5.50
62	Mormugao	43	GA-06-T-3313	Smt. Antoneta Fernandes, H. No. 235, Nr. Mog BAi, Katem, Baina, Vasco, Mormugao-Goa.	9225905876	8.50
63	Mormugao	45	GA-06-T-1156	Smt. Dnyaneshwari Ashok Naik, H. No. 286, Opp. SMRC Hospital, Regina Mundi School Road, Chicalim, Mormugao-Goa.	7030222865	8,000 Its
64	Mormugao	48	GA-06-T-6793	Shri. Santosh Kumar Yadav, H. No. 64, Near Sai Services, Chicalim, Mormugao -Goa.	9765946313	7.00
65	Mormugao	53	GA-06-T-8324	Shri. Umesh Kumar Yadav, F-15, First floor, Greva Residency, Nr. MES College Junction, Zuarinagar, Dabolim, Mormugao-Goa.	7510038866	7.00

Panaji, 17th April, 2015 (Chaitra 27, 1937)

SERIES I No. 3

OFFICIAL GAZETTE

GOVERNMENT OF GOA

PUBLISHED BY AUTHORITY

EXTRAORDINARY

GOVERNMENT OF GOA

Department of Water Resources

Notification

19/1/CE-WRD/EO/2015-16/22

FORM-I

[See Rule 6 (1)]

Whereas the Tillari Command Area Development Board has prepared a development scheme "COMMAND AREA DEVELOPMENT AND WATER MANAGEMENT PROGRAMME OF T.I.P IN GOA STATE" as required by section 16 of the Goa Command Area Development Act, 1997 (Goa Act 27 of 1997) (hereinafter called the "said Act");

And whereas the said development scheme is required to be published in the Official Gazette in terms of sub-section (1) of section 17 of the said Act, for information of the persons likely to be affected thereby;

Now therefore, in exercise of the powers conferred by sub-section (1) of section 17 of the said Act, the Command Area Development Board hereby publishes village-wise survey numbers in Annexure I for the said development scheme prepared in accordance with the provision of section 16 of the said Act for comprehensive development of the land described below and Notice is hereby given that said development scheme will be taken into consideration by the said Board after the expiry of thirty days from the date of publication of this Notification in the Official Gazette.

All objections and suggestions in respect thereof shall be forwarded to Command Area Development Board at Office of the Superintending Engineer, Circle Office II, GTIDC, Karaswada, Bardez-Goa before the expiry of thirty days from the date of publication of this Notification in the Official Gazette. The plan showing the village-wise Survey Numbers coming under the Command Area of Tillari Irrigation Project is also available with the Superintending Engineer, Circle Office II, GTIDC, Karaswada, Bardez-Goa.

(A) Existing field before development:

- | | |
|----------------------|--|
| (1) District: | North Goa |
| (2) Taluka: | Pernem, Bicholim & Bardez |
| (3) Name of village: | Under PERNEM TALUKA
Allorna, Ibrampur, Chandel, Casarvornem, Varkhand, Ozarim, Dhargal, Virnoda, Ugvem, Torsem, Pernem, Poroscodem, Ambere, Khazne, Mopa, Tamboxem.
Under BICHOLIM TALUKA
Advalpal, Athurli, Bicholim, Bordem, Lamgao, Carapur, Dhumase, Latambarcem, Mayem, Maulinguem, Mencurem, Mulgao, Narve, |

	Pilgao, Salem, Sarvan, Vainginim, Sirigao.	c. Compensation to be given:	Nil
	Under BARDEZ TALUKA	d. Amount to be recovered:	Nil
	Arpora, Assagao, Anjuna, Assonora, Bastora, Canca, Candolim, Calangute, Camurlim, Colvale, Guirim, Mapusa, Marna, Moira, Nagoa, Nerul, Nadora, Oxel, Parra, Palim, Pirna, Revora, Saligao, Siolim, Sangolda, Succora, Sirsaim, Tivim, Verla, Moitem.	11. The cost involved in the scheme as also each phase thereof as estimated:	As per approved Project Report for 114.00 crores, cleared by Ministry of Water Resources (CAD Division), Govt. of India CADWM Division vide letter No. 13-8/2006 CADWM/37 dated 18-02-2008.
(4) Survey No.:	As per Annexure-I placed at page C/37 to C/61	12. Charges or dues to be levied on the beneficiaries:	Nil
(5) Extent of Land:	14521.00 Ha.	<i>F. O. Hashmi</i> , Secretary (W.R.) & Chief Executive Command Area Development Board for TIP.	
(6) Boundaries:	As shown in the drawings	Porvorim, 17th April, 2015.	
(7) Actual area proposed to be covered under the scheme with sketch plan:	—do—	ANNEXURE I	
(8) Details of work or works to be executed		Details of Village-wise Command Area of TIP under	
a. by the authority:	Construction of Field Channels in the Command area of 14521 Ha. of T.I.P.	• BICHOLIM TALUKA • BARDEZ TALUKA • PERNEM TALUKA	
b. by the beneficiary/land owner:	Forming W.U.As for effective water distribution, maintenance of field channels and collection of water cess.	Details of Village-wise Command Area of TIP under BICHOLIM TALUKA	
9. Phasing of the scheme:			
a. Area-wise	As per project report		
b. Work-wise	—do—		
(B) Alterations in field boundaries due to development:—			
(10) Re-allocation or re-alignment of field channels			
a. Survey Numbers involved:	Nil		
b. Field boundaries proposed to be altered:	Nil		
		</	

Details of Village-wise Command Area of TIP under Pernem Taluka

Sr. No.	Name Village	Command Area in Ha.
1.	ALLORNA	910.00
2.	IBRAMPUR	320.00
3.	CHANDEL	145.00
4.	CASARVARNEM	405.00
5.	VARKHAND	200.00
6.	OZARIM	260.00
7.	DHARGAL	903.00
8.	VIRNODA	142.00
9.	UGVEM	87.00
10.	TORXEM	320.00
11.	PERNEM	225.00
12.	POROSCODEM	85.00
13.	AMBERE	40.00
14.	KHAZANE	35.00
15.	MOPA	93.00
16.	TAMBOXEM	84.00
TOTAL		4254.00 Ha.

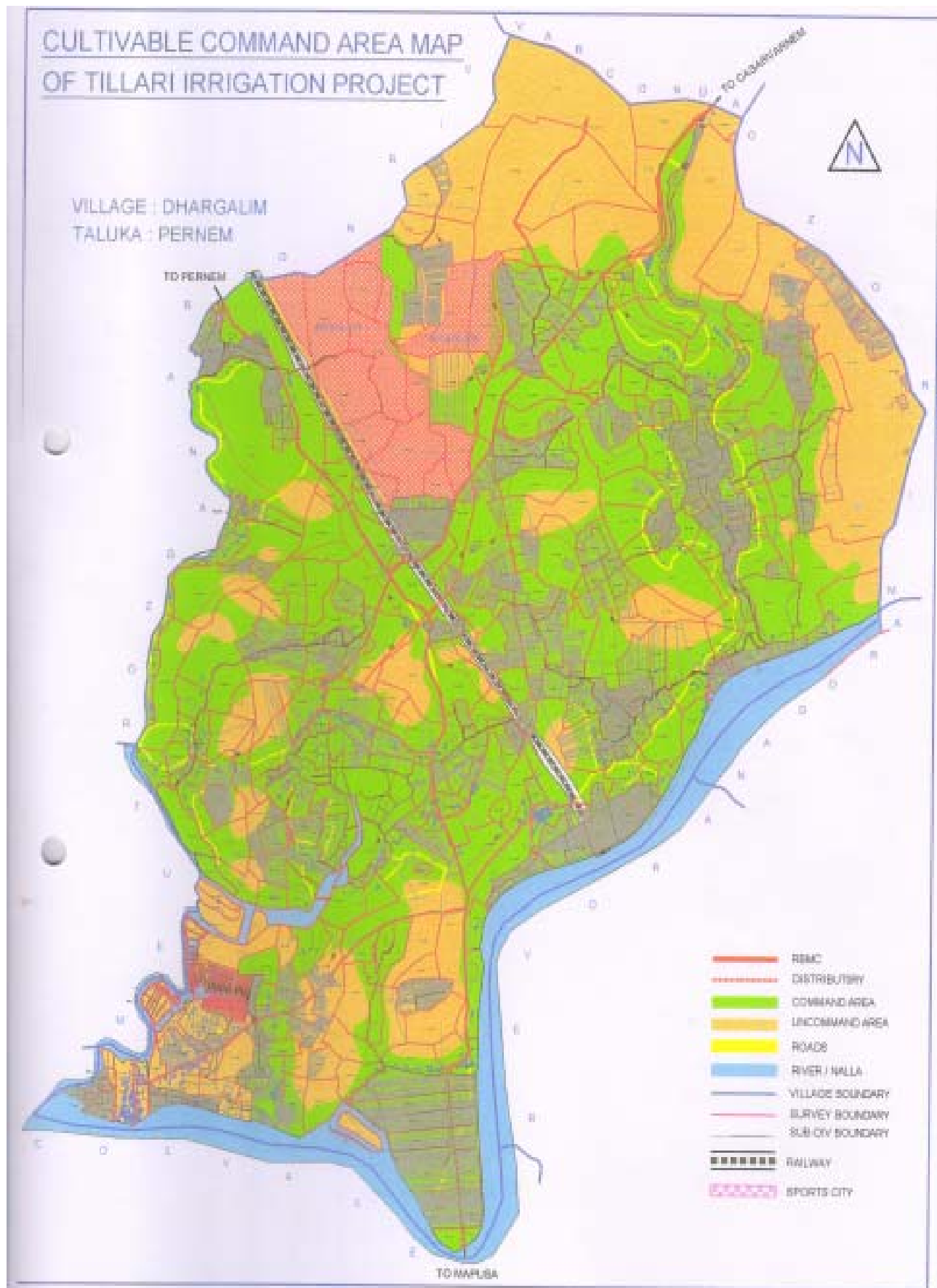
Command Area and Survey Nos. of the Village under Tillari Irrigation Project in Pernem Taluka

Sr. No.	Villages	Survey No.	Command Area
1	2	3	4
1.	ALLORNA	1 to 26, 27(p), 28, 29, 30, 31, 32(p), 33(p), 34(p), 36(p), 37(p), 38, 39, 40(p), 42(p); 43; 44(p); 45; 46(p); 47 to 58; 59(p); 60(p); 61(p); 62(p); 63(p); 64(p); 65(p); 66(p); 67(p); 68(p); 69(p); 70; 71; 72; 73; 74; 75; 76; 77; 78(p); 79(p); 80(p); 81(p); 82(p); 84(p); 85(p); 86(p); 87(p); 88(p); 89; 90(p); 91(p); 92(p); 93 to 112; 113(p); 114; 115; 116(p); 117 to 135; 136(p); 137(p); 138 to 142; 143(p); 144(p); 145(p); 146(p); 147(p); 148; 149(p); 150(p); 151(p); 152; 153(p); 154(p); 155(p); 156; 157(p); 158(p); 159(p); 178(p); 165; 179 to 208; 210 to 214; 220 to 227; 228(p); 229(p); 230; 231; 232(p); 233 to 239; 242 to 263; 264(p); 265 to 271; 272(p); 273; 274(p); 275 to 278; 279(p); 280(p); 281; 282(p); 283; 284(p); 286(p); 287(p); 288(p); 289; 290(p); 291(p); 292(p); 293(p); 295(p); 296(p); 297(p); 298(p); 299 to 305; 306(p); 307(p); 308(p); 309(p); 310; 311(p); 312(p); 313 to 326; 327(p); 328 to 335; 336(p); 339(p); 340(p); 341 to 346; 347(p); 348; 349(p); 350(p); 351 to 353; 354(p); 355; 356; 362(p); 363(p); 364; 366(p); 367 to 406 ,408 to 422; 423(p); 424(p); 425(p); 426; 427(p); 428(p); 429(p); 430 to 437; 439; 440; 441; 442(p); 443(p); 444(p); 445(p); 446(p); 447(p); 448(p); 453(p); 454 to 464; 465(p); 466(p); 470(p); 471(p); 472(p); 473; 474(p); 477(p); 478(p); 479 to 492; 493(p); 497(p); 498(p); 499 to 510; 511(p); 512(p); 513(p); 514(p); 516; 517(p); 518; 519(p); 520(p); 521(p); 528(p); 529(p); 530(p); 531(p); 532; 534(p); 533; 535; 537; 538(p); 539(p); 540; 541(p); 542.	928.40 Ha.

1	2	3	4
2.	IBRAMPUR	1 to 35, 36(Part), 37, 38, 39, 40(Part), 41(Part), 42(Part), 43(Part), 44(Part), 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56(Part), 57(Part), 58(Part), 59, 60, 61, 62(Part), 64(Part), 65, 66, 67(Part), 71(Part), 72(Part), 73(Part), 74, 75(Part), 76(Part), 77(Part), 78, 79, 80, 81(Part), 82(Part), 83(Part), 84, 85, 86, 87, 88(Part), 89(Part), 90(Part), 91(Part), 93(Part), 94(Part), 99(Part), 101(Part), 102(Part), 103(Part), 104(Part), 105(Part), 106(Part), 107(Part), 108, 109, 110, 111, 112, 113(Part), 114, 115(Part), 116, 117(Part), 118, 119, 120(part), 121(Part), 122, 123, 124, 125, 126, 127, 128, 129(Part), 130, 131(Part), 132(Part), 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 160, 161, 162(Part), 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 181(Part), 182, 183, 184, 186(Part), 189(Part), 190(Part).	329.80 Ha.
3.	CHANDEL	1(Part), 2(part), 3, 4, 5, 6(Part), 9(Part), 10(Part), 12(Part), 18(Part), 47(Part), 48(Part), 49(Part), 50(Part), 51(Part), 52(Part), 53(Part), 54(Part), 55(Part), 59(Part), 60(Part), 61(Part), 62(Part), 63, 64, 65(Part), 66(Part), 67 (Part), 68(Part), 69, 70, 71, 72, 73, 76, 77, 78(Part), 79(Part), 80(Part), 81(Part), 82(Part), 83, 84(Part), 85, 86, 87, 88, 89(Part), 90(Part), 91, 92(Part), 93(Part), 94(Part), 95(Part), 96, 98, 100, 101, 102, 103, 104(Part), 106(Part), 107(Part), 108, 109, 110(Part), 111(Part), 112, 113, 114(Part), 115.	146.67 Ha.
4.	CASARVORNEM	1 (Part), 2, 3, 4(Part) to 9(Part), 10, 12, 14 to 19, 20(Part), 21 to 24, 25(Part), 26, 27(Part), 29(Part) to 34(Part), 35, 37 to 41, 42(Part), 43 to 45, 46(Part), 48(Part), 49(Part), 50, 51, 52 (Part), 53 to 64, 65(Part) to 67 (Part), 68, 69 (Part), 70 to 73, 74(Part), 75 to 84, 85(Part), 86(Part), 87, 88(Part), 89(Part), 90, 91(Part), 92(Part), 93 to 96, 97(Part) to 99(Part), 100 to 107, 108(Part), 109, 110, 111(Part) to 113 (Part), 118(Part) to 120(Part), 124(Part), 126 (Part), 127, 128(Part), 131, 132(Part) to 133 (Part), 134, 135(Part), 139(Part), 140 to 168, 169(Part), 170 to 178, 179(Part), 188(Part) to 189(Part), 195, 270(Part), 274(Part), 282(Part), 285(Part), 286 to 287, 291(Part) to 294 (Part), 295, 296.	281.56 Ha.
5.	VARKHAND	5, 14 to 20, 136(Part), 138 (Part), 139 to 173, 174(Part), 175(Part), 176, 177, 178(Part), 179 to 181, 182(Part) to 185 (Part), 192(Part), 194 to 197, 198(Part), 202(Part) to 204(Part), 205 to 223, 224(Part), 230, 231(Part), 244 to 248, 253(Part), 254 to 257.	200.30 Ha.
6.	OZARIM	20(Part) to 22(Part), 23, 24(Part), 28(Part), 29(Part), 30, 31(Part), 32(Part), 33, 34, 35(Part), 36, 38, 39(Part), 41(Part), 42 to 44, 45(Part), 46(Part), 47, 48(Part), 50(Part), 52(Part), 53(Part), 56(Part), 59(Part), 60(Part), 62, 63, 64(Part), 65(Part), 67, 68, 70, 71(Part), 72, 73(Part) to 77 (Part), 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98(Part), 99(Part), 101(Part),	

1	2	3	4
		102, 103, 104, 105, 106(Part), 107(Part), 109, 110, 111(Part), 112 to 134.	218.86 Ha.
7.	DHARGAL	1, 2, 3, 5, 7(P), 8(P), 10(P), 12 to 22, 25, 26, 27, 28(P), 33(P), 34(P), 35(P), 36(P), 37(P), 38(P), 39(P), 40(P), 41(P), 42(P), 43(P), 47(P), 48(P), 49(P), 50(P), 51, 52, 53(P), 54(P), 55(P), 56(P), 57, 59, 60, 61, 64, 162, 163, 164, 165, 166(P), 167(P), 168, 169(P), 170, 172, 173(P), 174(P), 175(P), 180, 181(P), 182(P), 183(P), 184, 185, 186(P), 187(P), 188, 189(P), 190(P), 191(P), 192, 193, 194(P), 195 to 199, 218, 200(P), 201(P), 204(P), 205(P), 206, 207(P), 208, 209(P), 210(P), 211, 212, 214, 215, 218, 219(P), 220(P), 221, 222(P), 223, 224(P), 225(P), 226(P), 227(P), 228(P), 229(P), 230(P), 231(P), 232(P), 233(P), 234(P), 235(P), 236(P), 237(P), 238(P), 239(P), 240(P), 242(P), 243(P), 244, 245(P), 246 to 249, 250(P), 251 to 253, 255 to 257, 258(P), 259(P), 260(P), 261(P), 262(P), 263, 264(P), 265, 266, 267(P), 268, 269(P), 270, 271, 275, 276, 279, 280(P), 281(P), 282(P), 283(P), 284(P), 285(P), 286 to 292, 293(P), 294(P), 295(P), 296(P), 299, 300, 301(P), 302, 303 (P), 304(P), 305 (P), 306 (P), 308 to 311, 312(P), 313 to 322, 324(P), 327(P), 328(P), 330(P), 331(P), 332(P), 340(P), 341(P), 342, 343, 344(P), 345(P), 346 to 354, 355(P), 356(P), 357(P), 358(P), 359(P), 362(P), 369, 370(P), 371(P), 373 to 382, 385, 388, 390, 391(P), 392(P), 393(P), 394(P), 396(P), 405(P), 406(P), 407(P), 408(P), 409, 410, 411(P), 412, 417 to 432, 433(P), 434, 435(P), 436 to 444, 453(P), 454, 456 to 462, 463(P), 464(P), 465, 466 (P), 467 (P), 468(P), 471, 472, 473(P), 474, 475, 479, 480, 481(P), 482 to 484, 485(P), 486(P), 487, 488(P), 489 to 494, 495(P), 496, 497 (P), 498 (P), 499(P), 500 (P), 501, 503, 506, 508(P), 509(P), 510(P), 511(P), 512 to 518, 519(P), 520 (P), 521 to 529, 530(P), 531(P), 532(P), 533(P), 534(P), 535 to 539, 540(P), 541, 542, 543(P), 545, 546, 547(P), 548(P), 549(P).	981.55 Ha.
8.	VIRNODA	1 to 5, 7, 9 to 37, 39(P), 46(P), 51(P), 53(P), 62(P), 67(P), 68(P), 71, 72, 74(P), 76 to 79, 81	116.46 Ha.
9.	UGVEM	1, 2, 3(Part), 4(Part), 5, 6(Part), 7(Part), 8(Part), 9(Part), 10, 11(Part), 12 to 16, 17 (Part), 18(Part), 19(Part), 21(Part), 24(Part), 38(Part), 43(Part), 44 to 95, 97.	96.16 Ha.
10.	TORSEM	1 to 14, 15(Part), 16(Part), 17(Part), 18 to 25, 26(Part), 27(Part), 28(Part), 29(Part), 30(Part), 31(Part), 32(Part), 33(Part), 34(Part), 35(Part), 36(Part), 37 to 38, 39(Part), 40, 41(Part), 42(Part), 43 to 44, 45(Part), 47, 48, 49(Part), 50, 51(Part), 52, 53(Part), 54(Part), 55 to 65, 66(Part), 67 to 72, 73(Part), 74 to 83, 85 to 90, 91(Part), 93(Part), 94 to 96, 97(Part), 98 to 115, 118 to 120, 122(part), 123, 124(Part), 136(Part), 140 to 147, 148(Part), 149(Part), 151 to 152, 153(part) 155 to 156, 157(Part), 158 to 159, 187(Part), 195(Part), 196 to 200, 201(Part), 202(Part), 203(Part), 204, 205, 206(Part), 207(Part), 208(Part), 209, to 212, 213(Part),	

1	2	3	4
		214(Part), 215(Part), 216(Part), 217(Part), 218 to 222, 223(Part), 224(Part), 228(Part), 230 to 233, 234(Part), 235(Part), 238 to 246, 248 to 265.	365.38 Ha.
11.	PERNEM	2, 3, 6, 8, 9, 11, 12, 14, 15(p), 27(p), 28, 29, 33 to 42, 43(p); 44; 45(p); 46(p); 53(p); 55(p); 56(p); 57(p); 58(p); 72,74, 124(p); 127(p); 129(p); 130(p); 131; 132; 133; 134(p); 135(p); 136(p); 138(p); 140(p); 150(p); 151(p); 156(p); 157(p); 158; 159; 160; 161; 162(p); 163(p); 165(p); 166(p); 168 to 171; 173 to 178, 179(p); 180 to 182; 184, 185(p); 187; 188, 189(p); 202(p); 212(p); 215(p); 216(p); 220(p); 221(p); 281(p); 295; 296; 299; 300; 362(p); 383; 389; 399; 408(p); 419; 422(p); 426; 427; 428; 430; 434; 435; 436; 437; 438; 439; 440; 441; 442; 443; 445; 446(p), 447(p); 448; 449; 450; 451; 452; 453; 454; 455; 456(p); 457; 458; 459; 460; 463; 464; 465(p); 467; 468(p); 469; 471(p); 472(p); 473; 479(p); 483; 485(p); 486; 487; 488; 489.	217.32 Ha.
12.	POROSCODE	1 to 12, 13(Part), 15(Part), 16(Part), 18(Part), 19, 20, 21, 22, 23, 24, 25(Part), 26(Part), 27(Part), 28, 29, to 36, 37(Part), 38, 39, 40(Part) 41, 42, 43(Part), 44 to 49, 51, 52, 53, 54, 55, 56, 57, 62 to 69, 70, 71 to 76, 79, 83, to 85.	105.25 Ha.
13.	AMBERE	4(Part), 6(Part), 7(Part), 8, 9(Part), 10, 11 to 16, 17(Part), 18(Part), 19(Part), 21(Part), 22(Part), 23(Part), 24, 25, 26, 27, 28(Part).	36.63 Ha.
14.	KHAZANE	1 to 9, 11, 12, 13(part), 15(part), 17(part), 23(part), 24(part), 25, 26, 27 to 38, 39(part).	36.81 Ha.
15.	MOPA	1(Part), 2(Part), 4(Part), 5 to 7, 8(Part), 10, 11(Part), 13, 14, 15(Part), 16, 17, 18(Part), 19(Part), 20(Part), 21(Part), 27(Part), 28, 30(Part), 31(Part), 32(Part), 34(Part), 35(Part), 36(Part), 37(Part), 38(Part), 39, 40(Part), 41(Part), 42(Part), 43(Part), 44(Part), 45, 47(Part), 49(Part), 50(Part), 51, 52, 54, 55(Part), 56(Part), 57(Part), 59(Part), 60(Part), 61(P), 62(P), 63(P), 64(P), 65(P), 66(P), 67(P), 70(P), 71, 76(P), 77(P), 79(P), 80(P), 138(P), 141(P), 142(P), 143, 144, 145(P), 146(P), 147(P), 148, 149(P), 154(P), 155	103.85 Ha.
16.	TAMBOXEM	1 to 21, 22(P), 23(P), 24 to 27, 28 (P), 29 (P) 30 to 33, 34 (P), 35 to 39.	89 Ha.
Total			4254.00 Ha.



09/09/2020



Office of the Dy. Town Planner
TOWN & COUNTRY PLANNING DEPARTMENT,
TALUKA OFFICE PERNEM,
PERNEM - GOA

LANDUSE/ZONNING INFORMATION

Ref. No. 23/ZI/TCP/PER/2020/88/ 585

Dated: 01/09/2020

This information is issued based on the application received from Delta Corp Limited through Authorized signatory C/o. Delta Pleasure Corp Limited dated NIL to be read with details as marked on the Sy. plan submitted by the applicant give below:

Sr. No.	Sy.No./ Sub Divn.No.	Village/ Taluka	Area in m2	Zone as per RPG-2021 Remarks	Remarks
1	243/1-A	Dhargalim Pernem	40000	Partly Natural Cover Area and partly Cultivable under Irrigation Command Area	Nil
2	263/1	Dhargalim Pernem	34000	Partly Orchard zone, partly cultivable under Irrigation command Area	The property is affected by existing Nallah passing through the property
3	264/1	Dhargalim Pernem	60900	Partly Orchard zone, partly cultivable under Irrigation command Area	Nil
4	265/1	Dhargalim Pernem	5700	Orchard zone	Nil
5	265/2	Dhargalim Pernem	550	Settlement Zone	Nil
6	265/25	Dhargalim Pernem	1725	cultivable Zone under Irrigation command Area	The property is abutting to existing Nallah towards the eastern side
7	265/26	Dhargalim Pernem	1025	cultivable Zone under Irrigation command Area	Nil
8	266/1	Dhargalim Pernem	41100	Settlement Zone	The property is abutting to existing Nallah towards the eastern side
9	267/1	Dhargalim Pernem	26600	Partly orchard partly Cultivable under Irrigation command Area	Nil
10	267/1-A	Dhargalim Pernem	26600	Orchard Zone	Nil
11	268/2	Dhargalim Pernem	6800	Settlement Zone	Nil

Under R.T.I.
28/9/23
P.O. & Engineering Unit
E.O. Section, WRD
Sinhai Shrivastava
Atto. Pernem
Ptn. 403521

12	268/3	Dhargalim Pernem	9330	Settlement Zone	194
13	268/4	Dhargalim Pernem	10675	Settlement Zone	Nil
14	269/1	Dhargalim Pernem	25300	Settlement Zone	Nil
15	280/1	Dhargalim Pernem	82505	Settlement Zone	Plot is affected by NH 66 (old NH-17)
16	280/1-A	Dhargalim Pernem	13330	Settlement Zone	Plot affected by NH-66 (Old NH 17)
18	280/1-B	Dhargalim Pernem	9165	Settlement Zone	Plot affected by NH-66 (Old NH 17)
19	268/1	Dhargalim Pernem	31725	Settlement Zone	Nil

This information is valid only for three years from the date of issue of this letter or revision of the respective plan, whichever is earlier. Processing fees Rs. 48,000/- paid vide challan No. 88 dt. 25/6/2020.

This information is issued for the purpose of Personal Use.

(Vinayak D. Raikar)
D' Man Gr. I

(A. A. Deshpande)
Dy. Town Planner

Encl: As above

To,
Delta Corp Limited through
Authorised signatory
C/o. Delta Pleasure Corp Limited
C/o. Fisheries Jetty, Ground floor,
D.B. Bandodkar Road,
Panaji Goa.

Note: The land use/Zone information provided is as per Regional Plan/ODP/Zoning Plan inforce as on date of issue of the above information and shall not be construed as NOC in any form for undertaking any development including construction and for issue of conversion sanad or any other approvals.

Further any development shall be subject to provisions of Tenancy Act, Land Use Regulation Act, Forest Conservation Act, Highways Act, Ancient Monuments and Archeological Sites and Remains Act, (State and Central) EIA notification issued by MOUF, Coastal Regulation Zone, including section 17A of the TCP Act.

This certificate is issued based on the order issued vide no: 29/8/TCP/2018(pt file)/602 dtd. 28.03.2018 pertaining to guide line for processing various application.

29/9/23
P.O. & Engineering
EO Secy. W.R.D.
Sinchai



Government of Goa

Water Resources Department

Sinchai Bhawan, near Police Station, Alto-Porvorim, Bardez, Goa – 403 521
Tel: C.E. Off. - (0832) 2412047, Fax: (0832) 2413046

No: 5/21/CE-WRD/EO/2020-21/ 397

Date: 11/12/2020

To,
The Goa Investment Promotion & Facilitation Board,
1st floor, 'SPACES',
EDC Patto Plaza,
Panaji – Goa 403001.

Sub.: Online application bearing no.IPB021900173 received from M/s Delta Corp Limited, for grant of in-principle approval for Integrated Resort Development at Village of Dhargal, Pernem, Goa. – reg.
Ref.: Your letter No.5/2019/Goa-IPB/Misc/259 dated 09/10/2020.

Sir,

With reference to above, I am directed inform you that the list of survey nos. of Dhargalim village sent by you has been verified and found that the same falls in the command area of Right Bank Main Canal of Tillari Irrigation Project and hence cannot be considered.

Yours faithfully,

(S. B. Ghantkar)
Engineering Officer (WR)

28/12/20
P.O. & Engineering Officer,
E.O. Section, WRD,
Sinchai Bhawan,
Alto-Porvorim-Goa,
Fax: 403521

"WATER IS LIFE! SAVE WATER, SAVE LIFE!!"

"उदक हैं जिवित, वांचयात उदक, वांचयात जिवित"

True copy

APPENDIX I**(See Paragraph-6)****CATEGORY - B**

Note : If space provided against any parameter is inadequate, Kindly upload supporting document under 'Additional Attachments if any' at the last part of the Form1. Please note that all such Annexures must be part of single pdf document.

(I) Basic Informations

S.No.	Item	Details	
	Whether proposal involved violation of EIA notification	No	
	Weather Consent to Establishment Obtained	NA	
	Upload copy of CTE	NA	
1.	Name of the Project	Deltin Town	
	Proposal No	SIA/GA/MIS/76836/2022	
2.	Project Sector	INFRA-2	
3.	Location of the project	Dhargalim, Pernem, Goa	
4.	Shape of the project land Uploaded GPS file Uploaded copy of survey of India Toposheet	Block (Polygon) Annexure-GPS file  Annexure-Survey of india toposheet	
5.	Brief summary of project	Annexure-Brief summary of project	
6.	State of the project	Goa	
Details of State of the project			
S.no	State Name	District Name	Tehsil Name
NIL			
7.	Town / Village	Dhargalim	
8.	Plot/Survey/Khasra No.	243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A, 280/1-B.	
9.	S. No. in the schedule	8(b) Townships and Area Development projects.	
10.	Proposed capacity/area/length/tonnage to be handled/command area/lease area/number or wells to be drilled	Total plot area: 20,61,466.30 sq.mt Total BUA: 3,28,076 sq.mt ha.	
11.	New/Expansion/Modernization	New	
12.	Category of project	B	
13.	Does it attract the general condition? If yes, please specify	No	
14.	Is there any court order to consider your project under 'A' Category if	Yes Annexure-Uploaded court order to consider your project under 'A' Category	
15.	Does it attract the specific condition?	No	

16.	Is there any litigation pending against the project? Attach court order(s) given in this regard	Yes Annexure-Uploaded Attach court order(s) given in this regard
17.	Nearest railway station along with distance in kms.	Pernem Railway Station, 3.4 km
18.	Nearest airport along with distance in kms	Goa International Airport Dabolim, 47.7 km
19.	Nearest Town/City/District Headquarters along with distance in kms	Pernem , 5.2 km
20.	Distance of the project from nearest Habitation	0.16 Km , 0.16 Km km
21.	Details of alternative sites examined shown on a toposheet	No
22.	Whether part of interlinked projects?	No
23.	Whether the proposal involves approval/clearance under the Forest (Conservation)Act,1980?	No
24.	Whether the proposal involves approval/clearance under the wildlife (Protection)Act,1972?	No
25.	Whether the proposal involves approval/clearance under the C.R.Z notification,2011?	No
26.	Whether there is any Government Order/Policy relevent/relating to the site? Uploaded Order/Policy	Yes Annexure-Uploaded order/policy
27.	Whether there is any litigation pending against the project and/or land in which the project is proposed to be set up? (a)Name of the Court (b)Name of the Sub court (c) Case No. (d) Orders/directions of the court, if any and relevance with the proposed project.	Yes Taluk Courts TNC/8/2019 & TNC/9/2019, DCP/MUT/APL/9-7/2020,TNC/JMIII/2/2018 TNC/8/2019 & TNC/9/2019- application filed by Dhananjay Gadekar for declaration of tenancy with respect to property bearing S.No. 264/1 of Village Dhargalim. DCP/MUT/APL/9-7/2020- filed by Delta Corp limited for restoring the name of Babu Narayan Prabhudessai and deleting the name of Devendra Ramesh Prabhudessai and Vijaya Ramesh Prabhudessai with respect to property bearing S.No. 264/1 of Village Dhargalim. TNC/JMIII/2/2018- Application for temporary injunction under section 8 of the Goa Dam
28.	Project Cost(in Lac.)	189260
30.	Whether the proposed project/activity located in notified Industrial area(Yes/No)	No

Activity

- 1 Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)**

S.No	Information/Checklist confirmation	Yes/No	Details there of (with approximate quantities/rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	The proposed project site will be developed as an Integrated Resort Project.
1.2	Clearance of existing land, vegetation and buildings?	Yes	As construction is being planned, clearance of existing vegetation will be carried out. Clearance of vegetation will be undertaken after obtaining relevant permissions.
1.3	Creation of new land uses?	Yes	Proposed project site will be developed as an Integrated Resort project.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	Yes	Geo Technical investigation was carried out.
1.5	Construction works?	Yes	The proposed Integrated resort project comprises construction of 5 Star Hotel, 4 Star Hotel, 3 Star Hotel, Casino, Convention Centre, Retail, Cinemas, Multi-Level Car Park, and Water Park and related amenities.
1.6	Demolition works?	No	The site has no pre-existing structures hence no demolition activities are involved.
1.7	Temporary sites used for construction works or housing of construction workers?	Yes	Temporary Housing for workers will be provided at the construction site itself.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations and fill or excavations	Yes	Plans are enclosed as attachment in Pre-feasibility report.
1.9	Underground works including mining or tunneling?	No	NA
1.10	Reclamation works?	No	NA
1.11	Dredging?	No	NA
1.12	Offshore structures?	No	NA
1.13	Production and manufacturing processes?	No	NA
1.14	Facilities for storage of goods or materials?	Yes	Provision for temporary storage of construction materials will be made available at project site during the construction phase of the project.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	Operation phase: Sewage treatment plant of approximate capacity 3600 m ³ /day is proposed for treatment of Waste water generated during operation phase of project. Dry waste will be collected in garbage bins and will be handed over to authorized agency/recycler. Wet waste will be processed in Organic Waste Converters and compost will be used as manure for gardening.
1.16	Facilities for long term housing of operational workers?	No	

1.17	New road, rail or sea traffic during construction or operation?	No	
1.18	New road, rail, air water borne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	No	
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	
1.20	New or diverted transmission lines or pipelines?	No	
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	
1.22	Stream crossings?	No	
1.23	Abstraction or transfers of water from ground or surface waters?	Yes	Ground water through registered borewell will be used during construction and operation phase of the project.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	Some increment in runoff of storm water after development is anticipated. However, proper storm water drainage system will be provided for management of incremental runoff of storm water.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	There will be transportation of construction materials during construction phase. The existing road near the site will be utilized for the transportation of material and personnel. Proper mitigative measures shall be taken so as to reduce any kind of impact generated by the same. During operation phase, adequate parking space and internal roads will be provided within the project premises.
1.26	Long-term dismantling or decommissioning or restoration works?	No	
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	
1.28	Influx of people to an area in either temporarily or permanently?	Yes	There will be a temporary influx of workers at site during the construction phase. Since this is an integrated resort project hence there will be influx of tourists and locals during the operation phase of the project.
1.29	Introduction of alien species?	No	
1.30	Loss of native species or genetic diversity?	No	
1.31	Any other actions?	No	

2 Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
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2.1	Land especially undeveloped or agricultural land (ha)	Yes	The land is undeveloped land.
2.2	Water (expected source & competing users) unit: KLD	Yes	Operation Phase: Total Domestic consumption / day = 1248 m3. Total Hot water consumption / day = 426 m3. Total for flush water consumption /day = 1999 m3. Water theme park consumption /day = 248 m3 Total Water demand: 3921 m3 Source - Govt. water supply, Borewell and Water Tankers STP treated water for flushing demand
2.3	Minerals (MT)	No	
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	Yes	Construction materials such as Cement, Steel, Stone aggregates, Sand etc are required for construction of the project. These materials shall be procured from local reputed licensed vendors
2.5	Forests and timber (source – MT)	Yes	Minimal use of wood for making doors & door frames.
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT),energy (MW)	Yes	Operation Phase Total Electrical demand load: 21 MVA Source of Power Supply: Goa Electricity Department Back-up Power source: 11 Nos. 11 KV DG sets
2.7	Any other natural resources (use appropriate standard units)	No	

3 Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	No	
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	Creation of direct and indirect employment opportunities. Aesthetic value of area will also be improved. Improved infrastructure in the area.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.	No	
3.5	Any other causes	No	

4 Production of solid wastes during construction or operation or decommissioning (MT/month)

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates,
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			wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	No	NA
4.2	Municipal waste (domestic and or commercial wastes)	Yes	Operation phase: Dry waste: 3365 Kg/day Wet waste: 4734 Kg/day
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	Used oil from D.G sets will be disposed through the recycler registered with CPCB and having valid authorization of SPCB.
4.4	Other industrial process wastes	No	NA
4.5	Surplus product	No	NA
4.6	Sewage sludge or other sludge from effluent treatment	Yes	Sewage sludge generated will be used as manure.
4.7	Construction or demolition wastes	Yes	Construction waste shall be partly used on site and remaining shall be disposed through authorized contractor to the sites identified by the Govt of Goa.
4.8	Redundant machinery or equipment	No	
4.9	Contaminated soils or other materials	No	
4.10	Agricultural wastes	No	
4.11	Other solid wastes	No	E-Waste will be stored separately and disposed through authorized recyclers.

5 Release of pollutants or any hazardous, toxic or noxious substances to air(Kg/hr)

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	During operation phase, there will be a minor increase in vehicular exhausts. D.G. Sets will be used during power failure.
5.2	Emissions from production processes	No	NA
5.3	Emissions from materials handling including storage or transport	Yes	Generation of dust while handling and transporting of materials to the site is anticipated during construction phase.
5.4	Emissions from construction activities including plant and equipment	Yes	Temporary emission from construction equipment, and dust generation from construction activity and material handling is anticipated during construction phase.
5.5	Dust or odours from handling of materials including construction materials, sewage and waste	Yes	During construction phase there will be some dust generation due to handling of raw material and movement of vehicles carrying raw material.
5.6	Emissions from incineration of waste	No	NA

5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	NA
5.8	Emissions from any other sources	No	NA

6 Generation of Noise and Vibration, and Emissions of Light and Heat:

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	During construction phase Noise will be generated from following sources: 1. Construction machinery 2. Construction activity Potential noise generating sources during operation phase are: 1. DG sets (only in case of power failure) 2. Vehicular traffic
6.2	From industrial or similar processes	No	NA
6.3	From construction or demolition	Yes	Noise will be generated from Construction activity.
6.4	From blasting or piling	No	NA
6.5	From construction or operational traffic	Yes	Construction phase: Noise will be generated from vehicles transporting the raw material to the site. Operation phase: Noise will be generated due to traffic on adjacent road and due to visitors/guests coming to or visiting the resort.
6.6	From lighting or cooling systems	No	
6.7	From any other sources	No	

7 Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	No	
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	
7.3	By deposition of pollutants emitted to air into the land or into water	No	
7.4	From any other sources	No	
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	

8 Risk of accidents during construction or operation of the Project, which could affect human health or the environment

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	No	NA
8.2	From any other causes	No	NA
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?	Yes	Goa lies in Zone III of Seismic region. Design & construction of the buildings will be in compliance with Indian standards for Zone III seismic category.

9 Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: - Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) - housing development - extractive industries - supply industries - Other	Yes	The proposed project is well planned with supporting infrastructure such as roads, water supply, electricity supply system, storm water drainage system, water supply, waste water treatment, reuse and solid waste management.
9.2	Lead to after-use of the site, which could have an impact on the environment	No	
9.3	Set a precedent for later developments	No	
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	

(III) Environmental Sensitivity

S.No	Areas	Name/Identity	Aerial distance (within 15km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	Yes	Chapora River- approx. 2.83 Km, SE Terekhol River- approx. 6.55 Km, NW
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over	Yes	Morjim beach turtle nesting site - approx. 12.11 Kms, SW

	wintering, migration		
4	Inland, coastal, marine or underground waters	Yes	Chapora River- approx. 2.83 Km, SE Terekhol River- approx. 6.55 Km, NW Mandrem Beach- approx. 12.5 Km, SW Morjim Beach-12.11 Km, SW Ashvem Beach - approx.12.33 Km, SW Arambol Beach - approx. 13 Km, W
5	State, National boundaries	Yes	Goa-Maharashtra border - approx. 6.28 Km, NE
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	Yes	Dadachiwadi Road- 0.11 Km, NE Edapally-Panvel Highway/NH66- 0.02km, NE
7	Defence installations	No	
8	Densely populated or built-up area	Yes	Dhargal Industrial Estate- approx. 2.03 Km, SE Tuem Industrial Estate-approx. 4Km, SW
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Yes	Redkar Hospital and Research Center- 0.41 km, NW Government Primary School Tiwade- 1.48 Km, SW Shri Dhareshwar Mauli Temple- 0.3 Km, SW Shri Bavkadevi temple- 1.32 Km, W Shri Ravalnath Temple-1.4 Km, NW Santa Cruz Chapel-1.38 Km, SW
10	Areas containing important, high quality or scarce resources. (ground water resources,surface resources,forestry,agriculture,fisheries,tourism,minerals)	Yes	Chapora River: approx. 2.83 Km, SE Terekhol River: approx. 6.55 Km, NW Mandrem Beach: approx.12.5 Km, SW Morjim Beach: approx.12.11 Km, SW Ashvem Beach: approx.12.33 Km, SW Arambol Beach: approx. 13 Km, W
11	Areas already subjected to pollution or environmental damage.(those where existing legal environmental standards are exceeded)	No	
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions) similar effects	Yes	Goa lies in Zone III of seismic zone

(IV) PROPOSED TERMS OF REFERENCE FOR EIA STUDIES

1	Uploaded Proposed TOR File	Annexure-TOR file
2	Uploaded scanned copy of covering letter	Annexure-scanned copy of covering letter
3	Uploaded Pre-Feasibility report(PFR)	Annexure-PFR
5	Uploaded Form-1A	Annexure-Form-1A
6	Uploaded Conceptual Plan	Annexure-Conceptual Plan

(V) Undertaking

The aforesaid application and documents furnished here with are true to my knowledge

V. (i)	Name	DELTA CORP LIMITED			
	Designation	Manager			
	Company	DELTA CORP LIMITED			
	Address	10, Kumar Place, 2408, General Thimayya Road, Pune-411001			
Essential Details Sought					
S. No.	EDS Sought Date	EDS Sought			Letter
NO Record					
Additional Details Sought					
S. No.	ADS Sought Date	ADS Sought			Letter
NO Record					
Transferred Details(Category A To B)					
S. No.	Category A(Proposal No)	Category B(Proposal No)	Transferred Date	Reason	Letter
NO Record					

MINUTES OF THE 107TH GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (GOA-SEIAA) MEETING HELD ON 04/07/2023 AT 03:30 P.M. IN THE CONFERENCE ROOM OF THE 4TH FLOOR, DEMPO TOWER, PATTO, PANAJI-GOA.

The 107th meeting of the Goa - SEIAA (*hereinafter referred as 'Authority'*) was held on 04th July 2023 at 03:30 pm in the conference room, 4th floor, Dempo Tower, Patto, Panaji. The list of members present during the meeting is annexed (*refer Annexure - 1*).

At the outset, Chairman welcomed Authority members and briefed about the agenda items (*refer Annexure - 2*) to be taken up for discussion / deliberations and appropriate decision. Accordingly, the same were considered as detailed below.

1. To decide on application received from Goa Tourism Development Corporation Limited for development of five star resort project locating at Survey No. 206/1-H, 210/5-A, 211/1, 211/2, 211/3, 211/4, 211/5, 211/6, 211/7, 211/8, 212/1, 212/2, 212/3, 212/4 & 212/6, in Anjuna village Bardez Goa for prior Environment Clearance.

The representative of Goa Tourism Development Corporation Limited, Shri. Kundan D Naik (Dy. General Manager, GTDC) appeared before the Authority and explained the details of the project.

Decision: After scrutinizing the documents submitted by the Project Proponent and considering recommendation by the Goa-SEAC, the Authority members decided to grant the Environmental Clearance under provision of EIA Notification 2006 (as amended) with following conditions:-

- 1. Proponent needs to comply to the following "General Conditions" during construction phase:**
 - a. The Project Proponent (PP) should use Ready-Mixed Concrete (RMC) to minimize air / water/ land pollution and water usage during the construction phase.
 - b. Project Proponent should adopt roof-top rainwater harvesting/ conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
 - c. **Project Proponent should not disturb the natural drainage and as far as possible maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.**
 - d. Project Proponent should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-a-vis its land use categorization/ zoning.
 - e. The construction gross built up area of proposed construction is 26362.26 Sq.mts shall be in accordance with the existing FSI/ FAR norms of the local body and planning authorities and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work.

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- f. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- g. 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable, failing which the Environmental Clearance herein shall be deemed to be withdrawn and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
- h. Project proponent shall not make any change in the Surface Layout Plan/ Civil Plan submitted to the Authority without its prior permission. In case of any change(s) in the scope of the project and/or otherwise, the project proponent needs to inform this Authority.
- i. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- j. Arrangements shall be made that waste water and storm water do not get mixed.
- k. All the top soil excavated during construction activities should be stored if or use in horticulture/ landscape development within the project site.
- l. Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- m. Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary authorization of the GSPCB.
- n. Vehicles used for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.
- o. Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.
- p. The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipment etc. as per National Building Code (NBC) including measures from lighting.
- q. Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- r. Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- s. Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- t. Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- u. Energy conservation measures like installation of only for LEDs' for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used of LED's, if any, should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination. Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

2 *[Signature]* *[Signature]*

- aa. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided by providing separate entry and exit gate. Parking should be fully internalized and no public place should be utilized.
- ab. The Project Proponent shall make suitable provision for sewage disposal by providing Sewage Treatment Plant on site. The STP should be certified by independent expert and adequacy report in this regard should be submitted to GSPCB before the project is commissioned for operation. Necessary measures to be made to mitigate the odour problem from STP. Sewage Treatment Plant should be with operation and maintenance after commissioning/ completion of project with minimum period of 5 years.
- ac. Opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to be mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- ad. The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- ae. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
- af. Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the Project Proponent if it was found that construction of the project has been started without obtaining EC.
- ag. Six monthly compliance reports should be submitted to the MoEF&CC with copy to the Goa-SEIAA and GSPCB in hard as well as soft copy format for the period upto the Project completion.

2. Project Proponent should implement Dust mitigation measures for construction activities such as:

- a) Roads leading to or at construction sites must be paved and blacktopped (i.e. metallic roads). No excavation of soil shall be carried out without adequate mitigation measures in place.
- b) No loose soil or sand or construction and demolition waste or any other construction material that causes dust shall be left uncovered.
- c) Wind-breakers of appropriate height i.e. $1/3^{\text{rd}}$ of the building height and maximum upto 10 meters shall be provided.
- d) Water sprinkling system shall be put in place.
- e) Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.
- f) Mandatory implementation of dust mitigation measures for all construction and demolition activities, to be undertaken.
- g) Grinding and cutting of building materials in open area shall be prohibited.
- h) Construction material and waste should be stored only within earmarked area and roads side storage of construction material and waste shall be prohibited.
- i) No uncovered vehicles carrying construction material and waste shall be permitted.
- j) Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures shall be notified at the site.

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3. **Further**, the Committee decided to direct the Project Proponent to comply with the following **"General Conditions" during post-construction phase:-**

- a) Separate funds shall be allocated for implementation of environmental protection measures / EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
- b) The Project Proponent shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF & CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO₂ and NO_x (*ambient levels as well as D.G. stack emissions*) shall be monitored.
- c) The Project Proponent should provide facilities for storage and segregation of waste generated in three separate streams i.e. bio-degradable, Non bio-degradable and domestic hazardous waste in suitable bins and handover segregated wastes to authorized waste pickers or waste collectors as per the directions or notifications by the local Authorities and Goa State Pollution Control Board.
- d) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- e) Project Proponent shall store separately construction and demolition waste, as and when generated, in their own premises and shall be disposed of as per the Construction and Demolition Waste Management Rules 2016.
- f) The Project Proponent shall store horticultural waste and garden waste in their own premises and shall be disposed as per the directions of the local bodies.
- g) The Project Proponent in partnership with local bodies shall ensure segregation of waste at source by the generators as prescribe in the rules, facilitate collection of segregated waste in separate streams, handover recyclable material to either the authorized waste pickers or the Authorized recyclers. The bio-degradable waste shall be processed, treated and disposed off through composting or bio- methanation within the premises as far as possible. The residual waste shall be given to the waste collector or agency as directed by the local body.
- h) Noise should be controlled to ensure that it does not exceed the prescribed standards both during day & night time.
- i) The ground water drawl from existing/proposed bore wells if any should be done only with the prior permission of Ground Water Board. The ground water level and its quality should also be monitored regularly both during construction and operation phase in consultation with Ground Water Board.
- j) Energy Conservation measures such as solar lighting for common area, solar water heating system, LED's for lighting of areas, LED lights for signage, solar inverters on the etc should be adopted.
- k) Used LED lights should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.
- l) A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors etc and submit to the State Expert Appraisal Committee and a copy to GSPCB in three months time.
- m) Further this EC is issued without prejudice to the action initiated in the Environment





(Protection) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.

4. Specific Conditions

- a. The approach road leading to the site should be constructed prior to commencement of any construction activity at site as per the regulations of the Town & Country Planning Department.
- b. Project Proponent should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- c. Project Proponent needs to ensure that no treated water or any wastewastage shall be discharged into any water body. E-waste shall be disposed through Authorized vendor as per E-waste (*Management and Handling*) Rules, 2011.
- d. Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels towards south facing walls as and when made applicable in future.
- e. The Project Proponent shall utilise fly ash bricks in masonry works.
- f. At least 20% of the open spaces as required by the local building bye-laws shall be previous. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as previous surface.
- g. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- h. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- i. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate re circulation lines for flushing by giving dual plumbing system be done.
- j. The project proponent will provide landscape bed of 600mm wide X 600mm deep along the periphery of the plot to carry out plantation of trees. The treated water will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- k. Areas which are marked as No Development Zone (NDZ) should be clearly marked on site and no construction shall be carried out in the said NDZ. Land Profile of NDZ shall not be altered.
- l. No construction shall be done over the portion of land, shown as open space in the site plan.
- m. Project Proponent should obtain all the requisite permissions / NOCs / Licenses etc from all the competent authorities before commencement of any activity at site.
- n. *Solar power generation* - Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-

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conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage to enable installation of solar panels including battery storage system. In addition south facing walls to be utilized to install solar panels to harness optimum solar energy. Use of solar panels may be done to the extent possible like installing solar street lights. Project Proponent should install after checking feasibility solar plus hybrid conventional source as source of energy. PP should ensure storage of solar and release in the grid during peak hours.

- o. Solar based electric power shall be provided to each unit for at least two bulbs / lights and one fan. As proposed central lighting and street lighting shall also be based on solar power.
- p. This Environmental Clearance is issued subject to land use verification. Local authority/ planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgments / Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified by the competent authorities.
- q. Project Proponent should ensure and ascertain that 'civil plans' which were submitted to the Committee/ Authority during the process of project appraisal be submitted to other line Departments/ agencies concerned while seeking NOC/ Consents/ Permissions, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.
- r. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority, GSPCB and Planning authority.
- s. **Green Building norms should be followed with a minimum 3 star GRIHA/IGBC/ASSOCHAM GEM rating and Gold rating should be followed up.**
- t. The Project Proponent shall use construction debris for land filling wherever applicable and dispose the C & D waste in compliance to the Construction and Demolition Waste Management Rules.
- u. Bore well water is not to be used for construction phase, only used for drinking purpose and Project Proponent should maintain the meter reading on regular basis.
- v. Project Proponent should install Bio-gas plant to treat the Bio degradable waste.
- w. Building should be constructed as per National Building Code 2016 part-IV.
- x. Project Proponent should do Corporate Social Responsibility and Corporate Environmental Responsibility as recommended / approved by Goa - SEAC/ Goa SEIAA.
- y. As per office memorandum issued by MoEF&CC dated 1st May 2018, some of the activities which can be carried out in CER, are infrastructure creation for Drinking Water Supply, Sanitation, Health, Education, Skill Development, Roads, Cross Drains, Electrification including Solar Power, Solid Waste Management Facilities, Scientific Support and Awareness to Local Farmers to increase yield of crop and fodder, Rain Water Harvesting, Soil Moisture Conservation Works, Avenue Plantation, Plantation in Community areas, etc.

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- z. E-waste generated in the complex should be managed as per CPCB guidelines on E-waste management.
- aa. The Goa-SEIAA reserves their right to add any stringent condition or to revoke the Environmental Clearance, if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reasons.
- bb. The Project Proponent has to replace all acacia trees from the site by following due procedure; also plant local varieties of trees in No Development Zone (NDZ) of the property.
- cc. The PP has to maintain the natural drains existing on the site.
- dd. The slope towards sea to be conserved and not to undertake any undue development work along the slope.

2. To decide on application received from Deltin Town bearing Survey No. Survey No. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A and 280/1-B at Dhargalim village, Pernem Goa for prior Environmental Clearance..

The representative of Deltin Town Shri Premanand Gawas along with his consultant appeared before the Authority and explained the details of the project.

Decision: After scrutinizing the documents and going through the presentation, the Authority decided to raise the following ADS:

- i. To submit transport plan for disposal of excess cut soil.(71,502 m³)
- ii. To submit details of transport and Traffic Management Plan for water supply to be provided.
- iii. To submit the list of trees already cut, trees to be transplanted and trees to be planted on the proposed site.

3. To decide on application received for Expansion of Environmental Clearance from M/s Goa Medical College & Hospital for Construction of Tertiary Cancer Care Center & Blood Bank within the existing site premises bearing Survey No. 117 of Calapor village & Survey No. 46,48 &49 of Bambolim village, Tiswadi Taluka, North Goa.

The representative of M/s Goa Medical College & Hospital Shri Bala Korgaonkar along with his consultant appeared before the Authority and explained the details of the project. During the inspection conducted by the Authority on 30/06/2023 it was observed that considerable **excavation work and concreting** was done by the PP within the construction site prior to obtaining Environmental Clearance.

Decision: After scrutinizing the documents and going through the presentation, the Authority decided to refer back the matter to Goa State Expert Appraisal Committee

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to inspect the site and estimate the damage caused to the Environment and submit the report to the Authority.

4. Any other matter with permission of the chair

i. To decide in compliance of the order dated 21/06/2023 passed by the Hon'ble High Court of Bombay at Goa, in PIL Writ Petition No. 1093 of 2023(F).

Decision: After perusing the Hon'ble High Court order, the Authority decided to call the Petitioner Mr. Rohan Naik, the Sarpanch of Village Panchayat Usgao-Ganjam and Dr. Raju Prabhu for the hearing in the next subsequent meeting.

ii. To decide on Show Cause Notice against M/s Goa Sponge and Power Limited due to violation of EIA Notification 2006.

Decision: After scrutinizing the reply submitted by M/s Goa Sponge and Power Limited, the Authority decided to write the letter to the Goa State Pollution Control Board to seek the following information:-

- a. Details of action taken.
- b. Environmental damage caused by M/s Goa Sponge and Power Limited for initiating the work without prior Environmental Clearance.

iii. To decide on the letter No. 04/100/2023/MINOR/MINES /858 dated 08/06/2023 received from Directorate of Mines & Geology, Panaji Goa.

Decision: After scrutinizing the letter, the Authority decided to convey to the Directorate of Mines & Geology informing that all the Environmental Clearances granted by the District Environment Impact Assessment Authority have expired as on date.

The meeting ended with thanks to chair.



(Smt. Reshma Mathew)
Member, Goa-SEIAA



(Shri. Subhas Godse)
Chairman, Goa-SEIAA



(Dr. Sneha S. Gitte, IAS)
Member Secretary, Goa-SEIAA

Shri. Suhas Godse

Dr. Sneha S. Gitte, IAS

Smt. Reshma Mathew

Chairman, Goa-SEIAA

Member Secretary, Goa-SEIAA

Member, Goa-SEIAA

Annexure - 2

**AGENDA OF THE 107TH GOA STATE ENVIRONMENT IMPACT
ASSESSMENT AUTHORITY (GOA-SEIAA) MEETING ON 04/07/2023 AT
03.30 P.M. IN THE CONFERENCE ROOM OF THE 4TH FLOOR, DEMPO
TOWER, PATTO, PANAJI-GOA.**

5. To decide on application received from Goa Tourism Development Corporation Limited for development of five star resort project locating at Survey No. 206/1-H, 210/5-A, 211/1, 211/2, 211/3, 211/4, 211/5, 211/6, 211/7, 211/8, 212/1, 212/2, 212/3, 212/4 & 212/6, in Anjuna village Bardez Goa for prior Environment Clearance.
6. To decide on application received from Deltin Town bearing Survey No. Survey No. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A and 280/1-B at Dhargalim village, Pernem Goa for prior Environmental Clearance..
7. To decide on application received for Expansion of Environmental Clearance from M/s Goa Medical College & Hospital for Construction of Tertiary Cancer Care Center & Blood Bank within the existing site premises bearing Survey No. 117 of Calapor village & Survey No. 46,48 &49 of Bambolim village, Tiswadi Taluka, North Goa.
8. Any other matter with permission of the chair

RESEARCH

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Addressing gambling harms by reducing the supply of electronic gambling machines: a comparative study of Italy and Finland

Virve Marionneau^{1*}, Gabriele Mandolesi², Sara Rolando³ and Janne Nikkinen¹

Abstract

Background: Electronic gambling machines (EGMs) are amongst the most harmful forms of gambling. The high availability of EGMs is also linked to increased consumption. To reduce the burden of EGMs on public health, policies to reduce their numbers have recently been introduced in Italy and Finland. This study compares the aims and justifications of these legislative changes, as well as their overall impacts on total consumption.

Methods: The objectives and justifications of policies to reduce the number of EGMs were based on qualitative media analysis. The impacts on total consumption were measured using financial figures provided by gambling providers in Italy and Finland.

Results: Results show that the reductions in EGM numbers were justified in terms of public health concerns in both countries, but the amplitude of policies varied. In Italy, the reductions were more ambitious than in Finland, and included reductions in the number of gambling locations. The financial data nevertheless indicated that the reductions may not have been significant enough.

Conclusions: Public health concerns were initially highlighted in the media discussions, but eventually in both countries reduction policies were less ambitious due to industry lobbying and state revenue interests. The reductions therefore do not appear to have been effective in reducing total consumption and the burden on public health.

Keywords: Gambling, Italy, Finland, Electronic gambling machines, Total consumption

Background

Gambling is increasingly understood as a public health issue (e.g., [1, 2]). Harm reduction initiatives should therefore be targeted at the population level. Such initiatives can either aim at promoting less harmful products, or at making harmful products less harmful [3]. The latter approach has recently been taken in Italy and Finland, where the availability of electronic gambling

machines (EGMs) has been reduced. Availability reductions, in addition to mandatory identification and limiting product characteristics, are a key policy measure to limit exposure and consumption in gambling [4]. Pricing and taxation (widely used in tobacco and alcohol control, cf. [4, 5]) are less relevant, because particularly EGM and casino gambling have quite low price elasticities of demand [6].

EGMs are amongst the most harmful forms of gambling and EGM gambling is predominant in treatment services for gambling-related problems [3–5, 7–9]. EGMs include a plethora of structural characteristics that reinforce and prolong gambling, such as speed, sensory effects, interactive features, bonuses,

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near misses, losses disguised as wins (LDWs), and the volatility of pay-outs [4, 7, 10]. The replacement of traditional slot machines with electronic terminals that provide a variety of games is also likely to increase EGM harms [11, 12]. In addition to structural characteristics, situational characteristics, including the availability of EGMs, have been linked to increased consumption and harms. High visibility of EGMs in non-casino environments may further increase their harm potential. A systematic review [9] found that a high availability of EGMs is connected to increased volumes of gambling and increased problem gambling. In Australia, the number of EGM venues in a geographical area has also been connected to personal insolvency cases [13].

The current study compares the policy objectives and justifications of the Italian and Finnish EGM reduction policies and their public health impacts measured in terms of total consumption. Similar to the case of alcohol, gambling harms appear to increase in line with consumption [4, 14]. At the same time, the availability theory [15, 16] suggests that reduced availability reduces total consumption. This theory is also supported by evidence from the EGM closures during COVID-19 [17, 18]. Other perspectives, including gambling restraint erosion theory (GRET) and population adaptation have also been presented, but with less empirical support (see [19, 20], respectively).

The focus on Italy and Finland is justified by the high gambling spending and widespread availability of high-intensity non-casino EGMs in these two contexts. Comparative statistics on EGM numbers [21] in both countries place them amongst those with the highest number of EGMs per capita in Europe. In 2019, mainland Finland had about 21,100 EGMs, of which 18,500 were in non-casino locations and 2600 in gambling arcades. The EGM market in mainland Finland is operated by monopoly holder Veikkaus. (Penningautomatföreningen or PAF, operates on the autonomous Åland islands). In the latest population study, 31% of Finnish past year gamblers had gambled on EGMs within the last 12 months [22]. This is a comparatively high figure.

In Italy, the latest population study from 2017 to 2018 [23] shows that 5.9% of Italian gamblers had gambled on EGMs during the last 12 months. This is notably less than in Finland, but similar to figures from other European countries. Italy had approximately 320,000 EGMs in 2019 (after reductions had already commenced), of which 263,000 were mainly non-casino 'amusement with prizes' (AWP) machines, and the remainder were video lottery terminals (VLT) located in arcades. The EGM market in Italy is operated by 11 concessionaries, of which Lottomatica, Sisal, and Snaitech have the largest market shares [24].

Both countries have also recently addressed the harms caused by EGM gambling by initiating reductions in the numbers of EGMs. The Finnish EGM reductions, initiated by the monopoly holder Veikkaus, began in January 2020. The reductions initially set to remove 3500 non-casino EGMs (18% of non-casino machines), but the aim was later set to 8000 (43%). The Italian EGM reduction process was initiated by municipalities concerned over the spread of gambling already in the early 2000s. After discussions at the Permanent Conference on the Relationships between Central Government and the Regions, an agreement was reached in September 2017 to halve the number of gambling venues (from 98,600 to 48,000) and the number of EGMs by 35% (from 400,000 to 265,000) by the end of 2019. However, some pre-existing regional laws are more restrictive [25].

In the following, we introduce material from the literature on the impacts of EGM reductions and analyse the policy change in Italy and Finland. The justifications and objectives of the EGM reduction policies were analysed using qualitative media analysis. The impacts of the reductions on total consumption were measured using financial figures provided by EGM operators.

EGM reductions in previous research

Impact studies on previous EGM reduction or removal policies have suggested that reduced availability is connected to declining total consumption and problem gambling [4, 9]. Nevertheless, outcomes and impacts have varied depending on the extent of policies.

First, the magnitude of reductions matters. More important reductions yield better results [4] while a total removal or shutdown of EGMs is connected to the sharpest declines in total consumption. In Norway, the removal of EGMs from public spaces in 2007, and replacement in 2008–2009 with more sparsely situated and less harmful machines reduced gambling consumption and the need for treatment and support services [26–28]. Recent studies conducted on the impacts of COVID-19 on gambling support this observation. The precautions taken to limit the spread of the coronavirus have included EGM shutdowns in many jurisdictions, including Finland and Italy. These shutdowns have lessened the burden of harms caused by EGM gambling, including reduced total consumption and reduced gambling harms [17, 18, 29, 30]. Also, reductions in land-based gambling consumption have not translated into increases in online gambling in many jurisdictions [15, 30, 31].

Second, reducing the number of venues and the number of machines translates into reduced consumption. The frequency of venue visitation and gambling participation have been inversely connected to residential distance from venues [32], suggesting that a sparser network

may lead to lower total consumption. In Piedmont, Italy, reductions in EGMs locations and restrictions on opening hours in addition to removing 50% of EGMs was connected to a sharp reduction in gambling consumption, a reduction of at-risk gambling, and a reduction in help-seeking [27, 33].

Third, moving EGMs from non-casino locations such as supermarkets, tobacco shops, and petrol stations to separate gambling arcades may reduce consumption by limiting exposure to gambling. For example, in Poland, the non-casino EGM market was monopolised during 2009–2015. Machines were reintroduced in monopoly-holders' arcades as of 2018. According to the Polish Ministry of Health [34], limiting EGMs to arcades reduced total consumption. Other research has nevertheless argued that arcades may carry other harm-inducing characteristics. The co-consumption of gambling and alcohol and other venue effects may particularly increase the risk of harms in these environments [35].

Methods

The study was conducted using a mixed-methods approach combining qualitative media analysis and quantitative analysis of financial data. The aim of this approach was, first, to identify the objectives and justifications connected to EGM reductions in Italy and Finland, and second, to measure the impacts of EGM reductions on total consumption. Financial data reflect the total consumption on EGMs at a population level and therefore are considered to be a suitable proxy for population-level harms.

Media analysis

The media analysis is based on reporting prior to and during the announced EGM reductions in Italy and Finland. The aim of the media analysis was to analyse and identify (a) the justifications given for the reductions and opposition, and (b) the objectives given in public.

In Italy, the data comprise 17 articles that were collected from the online database of the best-selling newspaper in Italy, *Corriere della Sera* (CS, circulation around 300,000–400,000). In Finland, press items were collected from two main sources. Of the 45 articles analysed, 13 were found through the online database of the largest daily newspaper in Finland, *Helsingin Sanomat* (HS, circulation around 300,000). An additional 32 articles were found using an online database collecting news via RSS feeds of other publicly available Finnish newspapers and media sources (uutispuro.fi, consisting of articles from *Iltaalehti* (IL), *Iltaasanomat* (IS), *MTV3 uutiset* (MTV3), *YLE uutiset* (YLE) and *Keskisuomalainen* (KSML)). In both countries the items mainly consisted of news pieces, but also included opinion pieces and interviews with

relevant stakeholders. Most articles contained characteristics of several types of reporting.

Data were collected using the Italian and Finnish language versions of the keyword 'gambling machines' (Italian: *apparecchi da gioco/da intrattenimento, macchinette, slot machine*; Finnish: *rahapelikone, rahapeliautomaatti, pelikone, peliautomaatti*). Data were collected starting 1 year before the announced reductions (in Finland, September 2018, in Italy, September 2016) until the end of February 2020 as subsequent news focused only on the impacts of COVID-19 on gambling. We excluded articles that did not address EGM policy directly.

The data were analysed thematically by two researchers. The researchers discussed the relevant themes based on an initial reading. Finally, the articles were coded by using four thematic categories: (1) Declared aims of policy suggestions to remove or reduce the number of EGMs; (2) Opposition arguments to reductions/removals; (3) Expected impacts of policy changes; and (4) Decisions that were eventually reached.

Financial data

In the second part, we consider the financial impacts of EGMs in Italy and Finland in terms of total consumption. We accomplished this by looking at (1) the number of EGMs in Italy and Finland before and after (or during) the reductions; and (2) the amount of gross gambling revenue (GGR, i.e., stakes minus winnings) generated by EGMs before and after (or during) the reductions.

In Italy, the figures were drawn from the ADM Libro Blu between 2016 and 2019. The Libro Blu is the official annual report published by Agenzia delle dogane e dei monopoli (ADM, the public branch of the Ministry of Economy and Finance in charge of regulating the gambling market). The financial figures considered were gross gambling revenue and expenditure. The data only concern AWP as VLTs were not subject to reductions in Italy. As Italian gambling is operated by private multinational groups under concessions, we also investigated how the reductions impacted the share of revenue between the public and the private sectors.

In Finland, financial figures and EGM numbers were requested from the monopoly holder Veikkaus using official data request protocols. As the EGM reductions were set to commence in January 2020, but the COVID-related closures interfered with analysing the impacts after March, we were only able to compare the number of EGMs and the GGR produced by EGMs between January 2018 and February 2020. COVID-19 related EGM closures and possible transfers towards online gambling did therefore not impact the analysis in the current study. The Finnish data on EGMs concerns EGMs in non-casino locations as the reduction policy only targeted these. The

data received from Veikkaus had been indexed against the January 2018 baseline by the monopoly holder.

Results

The results are divided into two parts. First, we considered the justifications and expected outcomes of EGM reduction policies in Italy and Finland using the press material. In the second part, we considered the impacts of the EGM reductions on total consumption using financial figures.

Justifications and expected outcomes of EGM reduction policies

Italy

The debate preceding the EGM reduction policy in Italy followed from a disagreement between the state and the regions regarding whether to adopt a state-level EGM reduction policy. As reductions had already been initiated by municipalities, the debate reflects a conflict of interests between the central and local administrations in Italy. The main stakeholders present in the Italian discussion were therefore not gamblers or gambling providers, but political actors at different administrative levels as well as journalists functioning as watchdogs of political decision-making.

The first article in the discussion (CS 6.4.2016a) reported Prime Minister Matteo Renzi's announcement to reduce 30% of EGMs, including all non-casino EGMs. The justifications presented by the government were related to the social and health consequences of gambling expansion, as well as the requests of local governments. To reduce the risk of illegal machines, new AWP's would also function on a remote connection. However, on the same date, another article (CS 6.4.2016b) reported a suspicious change in the number of EGMs to be reduced. According to the Italian Stability Law, the calculated reduction of 30% should have been based on the number of machines registered in July 2015 (378,109) instead of the number registered in December 2015 (418,210). This difference was attributed to the lobbying power of the gambling industry. The article also noted that the wide availability of legal gambling does not necessarily prevent illegal gambling – one of the most used justifications by the state to expand gambling [27] – but it does increase state revenue.

The topic was picked up a few days later (CS 12.05.2016) in an article arguing that industry lobbies are 'so powerful that they change the course of the law'. In a reply (CS 12.05.2016), the ADM (the Italian monopoly administration) clarified that the December 2015 date referred to the prohibition of issuing new permits for slot machines that are not substitutes for those in use. This claim was followed by a rebuttal by two journalists, arguing that this

misalignment enabled the industry to pull over 40,000 old EGMs out of the warehouse, increasing the number of EGMs by 10.6% in 4 months. According to the article, this was another example of corruption in gambling policies. The same was argued in later reporting, pointing out that the stability law has not been followed by any implementing ministerial decree and the actual number of EGMs had increased (CS 16.11.2016; CS 08.04.2017).

In May 2017, discussion on EGMs was re-sparked following a new agreement resulting from the Permanent Conference to reduce the number of gambling venues and EGMs as well as to impose minimum distances between EGMs and sensitive places (such as schools or hospitals) (CS 05.05.2017a; b). The president of the national association of municipalities thought it was '*a good compromise*' (CS 05.05.2017a). However, in a more critical commentary by a journalist, the agreement is deemed '*unpresentable*' and unsatisfactory, as the suggested regulation was less strict than the local regulations already in place. The article also points out that 'anti-gambling movements' were not satisfied with the agreement. Again, this unsatisfactory result was attributed to industry lobbying. The issue of minimum distances raised further discussion throughout the period researched, mainly from the perspective of local representatives demanding tighter restrictions (CS 09.11.2016; CS 07.07.2017).

Overall, items from 2016 are more openly in favour of heavy EGM reductions and critical of the state and industry lobbies. The need to reduce the number of EGMs was justified in terms of reducing poverty and social inequalities (CS 12.05.2016; CS 29.3.2017) but also the risk of corruption was noted (CS 16.11.2016; CS 08.04.2017).

In 2017, the reporting changed. Individual responsibility for gambling harms was highlighted in an interview about gambling treatment services (CS 28.05.2017), a researcher of the Istituto Superiore di Sanità (Italian National Institute of Health) underlining that '*the problem is not gambling itself but the relationship with it*'. The previously critical media appears to have accepted the compromise solution concerning EGM reductions. In the last openly critical item of the analysed period (CS 15.11.2017), a journalist noted that no government, either right or left, or even the media was willing to give up gambling proceeds. This may be part of the reason *Corriere della Sera* did not discuss EGMs further in 2018–2019. Another reason might be the policy decision regarding the extent of national-level reductions, although this is less likely given the important space given to the issue before. Only one press item was retrieved per year during 2018–2019 and neither focused directly on EGMs.

The negative financial outcomes of the reductions appear to have been taken for granted and were not explicitly discussed in the Italian newspaper data. At the

same time, other measures, such as tax reform on EGMs winnings to increase state gambling revenue was later introduced (CS 25.10.2018).

Finland

Like the Italian case, the developments that led to EGM reductions in Finland followed from a longer discussion on EGM harms, but also from the justification of the Finnish gambling policy [36]. One of the legal justifications for the Finnish gambling monopoly is to prevent and reduce gambling-related harm (Law 2112.2016/1286, section one). However, the aggressive advertising campaigns of the monopoly holder and the placement of EGMs increased critical public discussion during 2018 and 2019 (IL 14.8.2019). In March 2019 (MTV3 20.3.2019), a citizen initiative was launched by experts by experience of gambling harms with the aim to remove EGMs from public spaces. In Finland, citizens can initiate a process for legal change by petition. In August 2019, the Minister of the Interior Maria Ohisalo also suggested looking into removing EGMs from public spaces (HS 12.8., 2019; MTV3, 12.8.2019).

As in Italy, the Finnish media was also initially critical of EGMs. However, unlike the Italian case, the debate in the Finnish press appeared to consider a wider network of stakeholders in EGM policy while the role of journalists remained marginal. The main proponents of removals were citizen activists (MTV3, 20.3.2019), researchers (HS 14.8.2019; HS 16.8.2019), and a few politicians (HS 25.11.2018). Their main argument was to reduce gambling-related harms particularly amongst lower income groups (MTV3, 12.8.2019; HS 16.8.2019). A citizen opinion poll from 31 August 2019, reported widely across the media (IL; KSML; YLE; MTV3; HS 31.8.2019) showed that 60% of Finns were willing to move EGMs from non-casino locations to separate gambling arcades. Some members of parliament (MPs) also supported removing EGMs from public spaces. Based on an opinion poll amongst MPs, those connected to the gambling monopoly Veikkaus were more likely to be against EGM removals than MPs without any relationship with Veikkaus (IS, 17.8.2019). One-quarter of Finnish MPs disclosed a connection with Veikkaus, either as members of the Veikkaus board or via their positions in associations benefitting from revenue generated by Veikkaus (IS, 17.8.2019).

The most vocal stakeholders against the removal of EGMs were representatives of the redistribution network (IL 15.8.2019; MTV3, 16.8.2019; HS 26.8.2019). In Finland, supermarkets, kiosks, and restaurants receive commissions for providing gambling products, including EGMs (YLE 15.2.2020; IL 15.2.2020). The main argument in support of EGMs was the revenue from machines particularly for smaller shops and restaurants

and the ensuing effects on employment (IL 15.8.2019; HS 26.8.2019).

Following from this discussion, Veikkaus announced in September 2019 that it would reduce the number of EGMs during 2020 along with other changes to improve its approach to 'responsible gambling' (HS 5.9.2019 KSML 5.9.2019). In October, Veikkaus specified that it would remove 3500 EGMs during 2020 and up to 8000 machines in total (IS 31.10.2019; KSML, 31.10.2019). The reductions would be conducted mainly by removing some of the machines from locations with a high number of EGMs (YLE 3.12.2019). The suggestion by Veikkaus was much inferior to the initial suggestions. Furthermore, and in contrast to the Italian case, the reductions did not target the number of resale points. This was probably due to the opposition of resellers. One representative of resellers stated that *'we now have five machines. You take away the two that make the least profit and replace them with one that makes more. The impacts will be minor'* (IS, 24.2.2020). Some criticism of the limited extent of the proposed reductions emerged from researchers (KSML, 31.10.2019), but reporting on this was limited. The suggestion of the monopoly holder appeared to be accepted in the media without further need for public discussion.

The remaining articles focused on the expected financial outcomes of the reductions. Veikkaus estimated that the planned reductions of EGMs, alongside other changes (reductions in marketing, mandatory identification in 2021) would reduce its annual gross gambling revenue (GGR) by approximately 150-200 million Euros as of 2021 (YLE, 31.10.2019; KSML, 31.10.2019). Reduced total consumption would also impact the revenue of beneficiaries and the redistribution network. Previous research has shown that 60% of Veikkaus GGR is directed to beneficiaries and almost 10% to the resale network [37]. Reductions are estimated to impact almost 2200 resellers (of 6300) (YLE 3.12.2019), some of whom also voiced concern over reduced revenue in media reporting (MTV3, 7.11.2019). Interestingly, impacts on the levels of gambling-related problems or harm were no longer discussed: all discussion on expected outcomes only focused on revenue and beneficiaries.

Impacts on total consumption

As discussed above, in both Italy and Finland, EGM reductions were justified in terms of public health concerns, but the amplitude of policies varied. In Italy, the aim was to reduce machines by 35%. In Finland, the initial plan was to reduce 18% of non-casino machines, but the aim later increased to 43%. The Finnish reductions did not reduce the resale points, as opposed to a 31% reduction of gambling locations in Italy.

In the following we present available data on the impacts of the reduction policies on total consumption.

Italy

The Italian data on the total consumption of EGMs focus on the reductions targeting non-casino AWP machines during 2016-2019. Figure 1 describes the total reduction in machine numbers during the period while Fig. 2 describes the reductions in venue numbers.

As shown in the figures, most reductions took place between 2017 and 2018. Overall, the number of AWP

had decreased by 35% and the number of venues had decreased by 31%, as planned. However, reductions targeting AWP also translated into a 7% increase in the numbers of VLTs (a structurally more addictive type of EGM confined to gambling arcades). This shift suggests that while the overall numbers of EGMs declined in Italy, some machines were substituted with more addictive modern multigame terminals.

Figure 3 shows the impacts of the AWP reductions on total GGR in 2016-2019 as well as the shares of the industry and state revenue as reported in the ADM yearly reports.

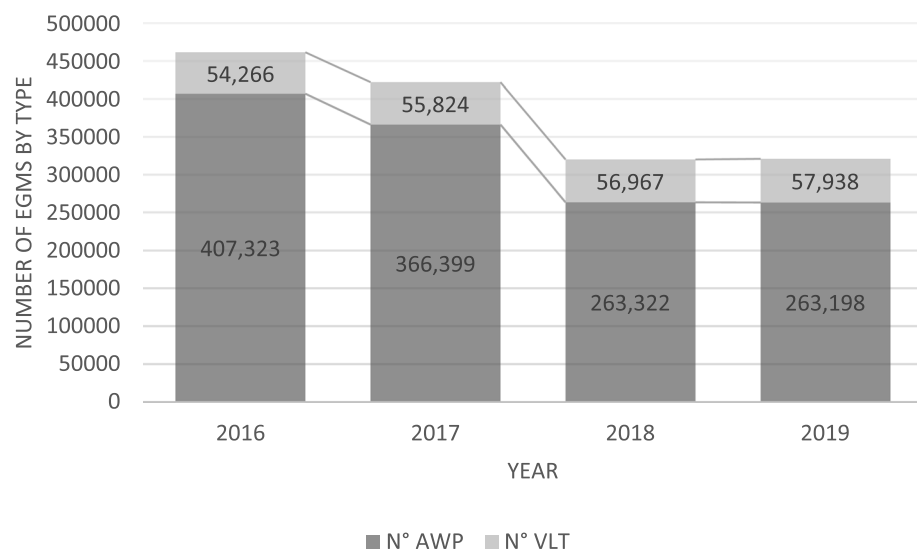


Fig. 1 Total numbers of AWP and VLTs in Italy 2016-2019

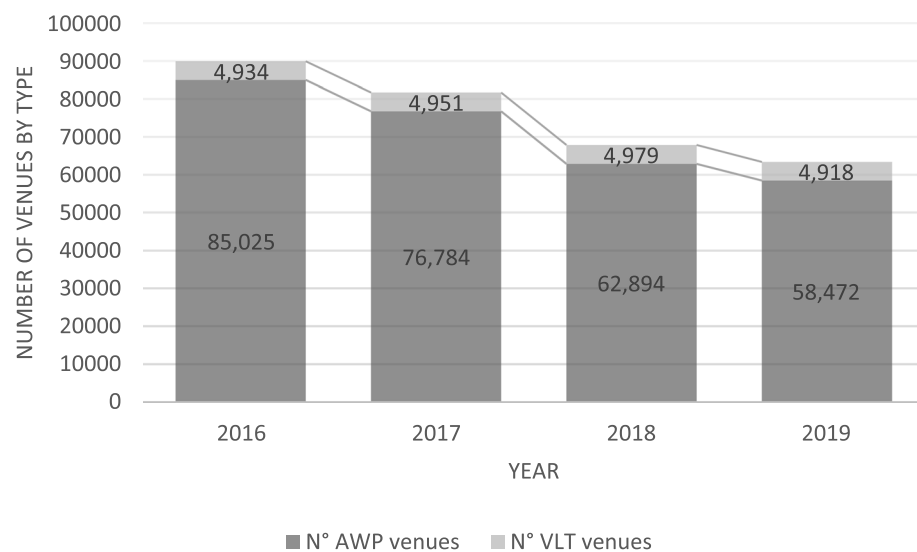
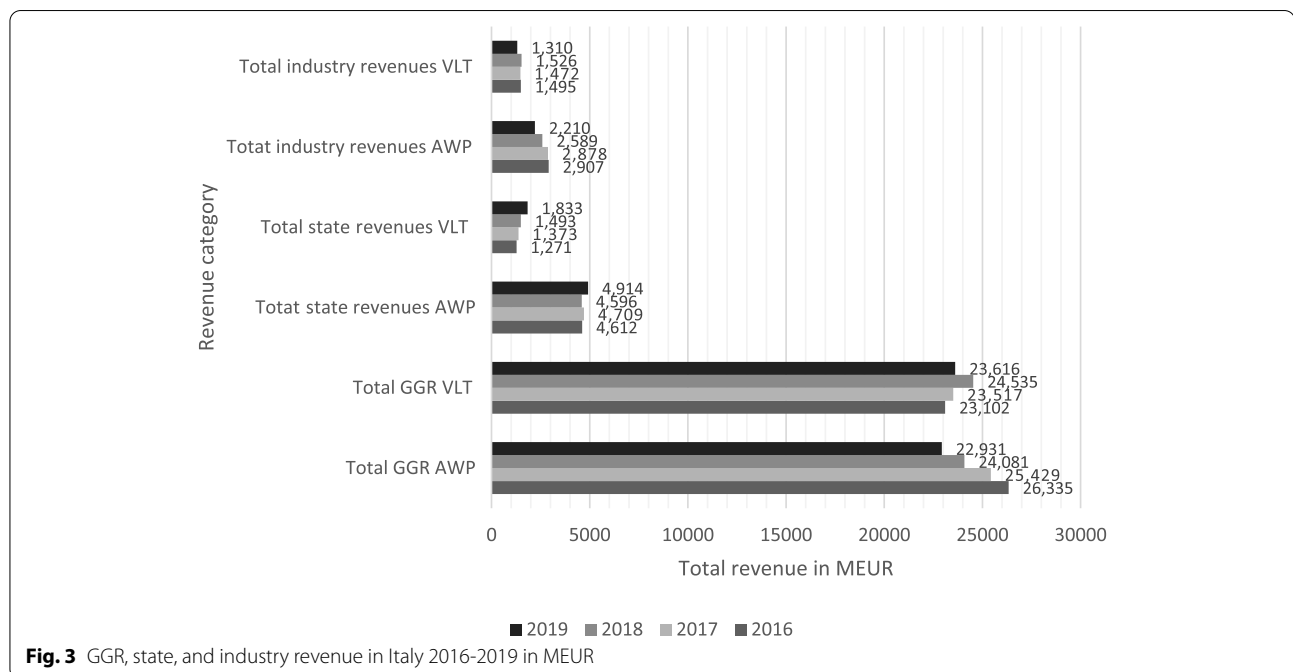


Fig. 2 Total numbers of AWP and VLT venues in Italy 2016-2019



The figure shows the main outcomes. First, the GGR, or total consumption, of AWP decreased in the period 2016-2019 by 13%. The GGR of VLTs increased in the same period by 2%. Overall, the total consumption of EGM gambling therefore declined by only 6%, and not proportionately to the reduction of 35% in machine numbers. A possible explanation for this is that the AWP targeted for removal were already not profitable and the highest producing machines were left in the market. Furthermore, a substitution effect from AWP to newer VLTs has compensated some of the loss of GGR, although not fully. Substitution between gambling products is rarely complete. New gambling products substitute some consumption of existing ones, but also increase total market (see also [38]).

Second, state revenue (the surplus raised after operating costs) increased by 7% in the case of AWP despite reductions, and by 44% in the case of VLTs. This observation also supports the substitution hypothesis. A shift towards VLT gambling increased overall state revenue. The increase in revenue is also explained by a pay-out reduction from 2019 lowering the return percentages of AWP from 70 to 68% and the return percentages of VLTs from 84 to 83%. In the same period, industry revenues from EGMs declined.

Finland

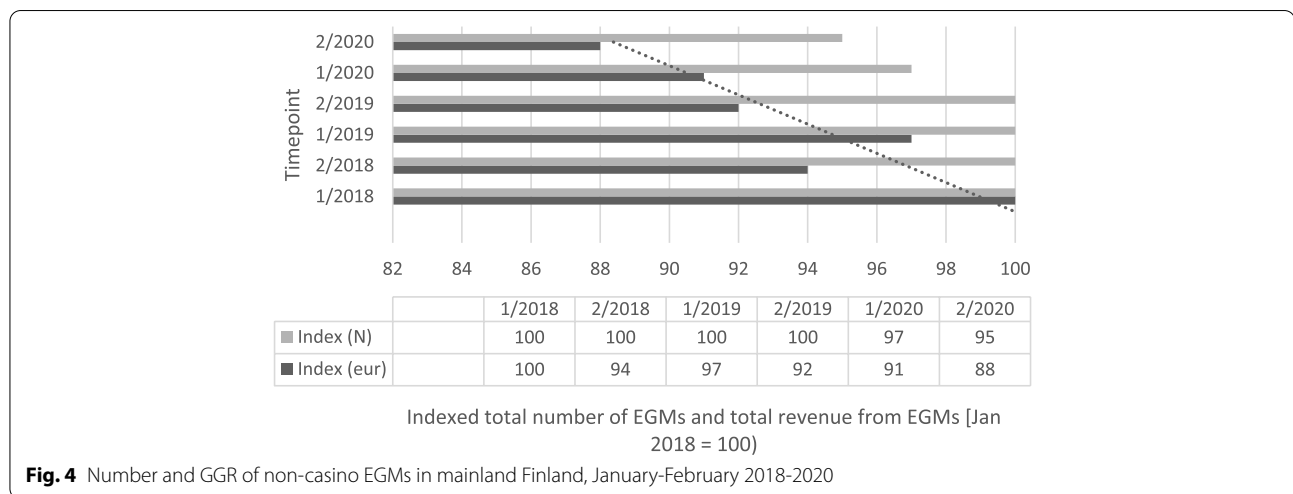
The Finnish data obtained from Veikkaus only covers the initial phase of the reductions as the impacts of EGM removals were confounded by the impacts of

COVID-19-related EGM closures after March 2020. The data were indexed by the gambling operator. Figure 4 presents the indexed number of non-casino EGMs and the indexed GGR produced by non-casino EGMs between 2018 and 2020. The number of EGMs and the total GGR from EGMs in January 2018 are indexed at 100 and subsequent data points are calculated to show trends in the change.

The data show that during the first 2 months of 2020, the number of non-casino EGMs had been reduced by 5%. The starting situation indexed at 100 refers to 18,500 EGMs in non-casino locations. The GGR of EGMs had also declined, but the regression suggests that the decline was connected to a longer-term trend of declining EGM gambling rather than the reduction. However, this was expected due to the limited scope of the reductions during the period of analysis. The impacts of the overall reductions could not be analysed with these data due to the onset of COVID-19.

Discussion

The current study has investigated the justifications, expected outcomes, and impacts on total consumption of EGM reduction policies in Italy and Finland. In both countries, EGM numbers in non-casino locations have been reduced in recent years by approximately one-third. Availability reductions may enhance consumer protection in gambling, but the reductions need to be well-targeted and significant. EGMs are amongst the most harmful forms of gambling and reducing total



consumption on EGM gambling and exposure to EGMs in non-casino locations is therefore an important public health intervention. According to the availability theory and total consumption theory, limiting availability should translate into reduced total consumption and therefore reduced harms [4, 14, 15].

According to the data presented in this study, the reductions put in place in Italy and at least in the first months in Finland have not translated proportionally into total consumption. This finding might indicate that the availability theory is not valid, but as evidence from EGM shutdowns during COVID-19, as well as stricter regional reductions in Italy have shown, it is more likely that the reductions in the Finnish and Italian cases have not been significant enough. Criticism of the extent of reductions was also voiced in the media material in both countries. Initially, media discussions in both countries departed from the total removal of all non-casino EGMs but ended in a compromise of more limited reductions. This also limited the extent of public health benefits.

First, in Italy reductions have targeted less profitable machines. One reason for this may reside in revenue interests. In Italy, the state even increased its EGM revenue during the reductions following a tax reform. Targeting less profitable machines may be the case in Finland as well. As discussed above, representatives of the resale network also argued that only the least profitable machines would be removed, similarly to the case of Italy. The Finnish media analysis further suggests that the important revenue interests of resellers and beneficiaries (4000 in total) may have had an impact on how reductions were accomplished.

Second, the reduction in the number of EGMs may not have been significant enough. In the Finnish case, due to data issues we could only analyse the first 2 months

of reductions, translating into a decrease of only 5% in machine numbers. However, according to an interview with a Veikkaus representative from 2018, the use rate of EGMs has been only 30% (MTV, 16.8.2019). As the reductions have been targeted at reducing the number of machines in locations that already had a high number of EGMs, the usage rate of the remaining machines may simply increase while no impact will be visible in terms of total consumption. With a usage rate of only 30%, even the anticipated reduction of 43% in the number of EGMs may not have been enough. In Italy, reductions only targeted AWP and not the more addictive VLTs, the number of which increased during the reduction period.

Third, the number of EGMs alone does not appear to be as relevant as the number of resale points. In Italy, by imposing a minimum distance from sensitive places, reductions also targeted gambling locations. In Finland, the number of locations was not targeted in the policy and exposure to EGMs remained similar in public environments, following the criticism and revenue concerns of the resale network according to the media analysis. No minimum distance from sensitive locations was discussed.

EGMs form a significant part of consumption by problem gamblers in the contexts studied. Public health concerns were also highlighted as justifications in the media discussions on EGM reductions in both countries, albeit alongside concerns about financial results and profits. The media analysis shows that while stricter regulations on the EGM market are initially suggested, the more industry-friendly but less dramatic proposals in the end appeared to be accepted in both countries. This may be due to either lessened public interest but also industry influence. If gambling is to be considered a public health issue, these commercial determinants of health should

be addressed [39]. Effective reductions of EGMs inevitably impact company revenue and their monetary contribution to societies. EGMs are purposely designed to be addictive [7]. Limiting access to them is therefore necessary if public health is to be advanced [40].

The current study has been limited to two European countries. However, the cases of Italy and Finland provide relevant results also for other countries and jurisdictions with widespread EGM gambling, such as Australia. As the study has shown, policies to limit EGM harms via availability reductions need to be implemented extensively to achieve reductions in total consumption. As EGM reduction policies have not been widely addressed in previous research, documenting the impacts of policy experiments is crucial to inform decision-makers also in other countries.

The results have also been limited by data availability. More research would be welcome on the impacts of EGM reductions on gambling harms and problem gambling in Italy and Finland, as well as elsewhere. More research is also needed on government reliance on EGM revenue and the coordination of state regulators between the explicitly opposing tasks of revenue generation and the protection of public health (cf. [41]). However, the current study has been able to show the mismatch between justifications, objectives, and implementation of EGM reduction policies in Italy and Finland, and to suggest some ways forward to improve future EGM reduction policies in these or other contexts.

Conclusion

This study has compared the justifications of EGM reduction policies in Italy and Finland, as well as the effects of reductions on total consumption. The results have shown that despite ambitious initial suggestions to remove or reduce the number of EGMs in both countries, the public debate and industry lobbying resulted in lukewarm solutions. Financial figures indicate that the reductions may not have been significant enough in either country to reduce the burden of EGMs on public health efficiently.

Abbreviations

ADM: Agenzia delle dogane e dei monopoli; AWP: Amusement with prizes; CS: Corriere della sera; EGM: Electronic gambling machine; GGR: Gross gambling revenue; GRET: Gambling restraint erosion theory; HS: Helsingin Sanomat; IL: Ilta-lehti; IS: Iltasanomat; KSML: Keski-suomalainen; LDW: Losses disguised as wins; MEUR: Million euros; MP: Member of parliament; VLT: Video lottery terminal.

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None.

Authors' contributions

VM was responsible for Finnish data collection and drafting the first version of the article. VM and JN wrote sections related to Finland together. GM collected

financial data on Italy. SR collected the media analysis on Italy. GM and SR wrote the sections related to Italy. The author(s) read and approved the final manuscript.

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Availability of data and materials

The data underlying Fig. 4 are available from the Finnish gambling monopoly operator but restrictions apply to the availability of these data. An official data request should be made to Veikkaus to gain permission for its use. Other data are available from public sources and can also be requested from the authors.

Declarations

Ethics approval and consent to participate

Not applicable. This study did not use human participants. The data used in this study do not require an ethics approval according to the guidelines of the Finnish National Board on Research Integrity (TENK).

Consent for publication

Not applicable.

Competing interests

The Centre for Research on Addiction, Control, and Governance (CEACG) at the Faculty of Social Sciences, University of Helsinki, obtains a substantial portion of its annual operating budget from the Finnish Institute for Health and Welfare (THL). These funds emanate from hypothecated gambling taxes (legal agreement, the Ministry of Social Affairs and Health charges the costs of research from Veikkaus). In the past, JN has received remuneration from a charity lottery and travel reimbursement from the Finnish Association for Gaming Research. VM has also received funding from the Finnish Association for Gaming Research. The association (now defunct) obtained its funding from Finnish gambling monopolies. SR and GM have no competing interests to declare.

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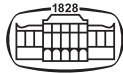
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FULL-LENGTH REPORT



ABSTRACT

Background: Electronic gaming machines (EGMs) are one of the most harmful forms of gambling at an individual level. It is unclear whether restriction of EGM functions and accessibility results in meaningful reductions in population-level gambling harm. **Methods:** A natural policy experiment using a large ($N = 15,000$) national dataset weighted to standard population variables was employed to compare estimates of gambling problems between Australian residents in Western Australia (WA), where EGMs are restricted to one venue and have different structural features, to residents in other Australian jurisdictions where EGMs are widely accessible in casinos, hotels and clubs. Accessibility of other gambling forms is similar across jurisdictions. **Results:** Gambling participation was higher in WA, but EGM participation was approximately half that of the rest of Australia. Aggregate gambling problems and harm were about one-third lower in WA, and self-reported attribution of harm from EGMs by gamblers and affected others was $2.7\times$ and $4\times$ lower, respectively. Mediation analyses found that less frequent EGM use in WA accounted for the vast majority of the discrepancy in gambling problems (indirect path = -0.055 , 95% CI -0.071 ; -0.038). Moderation analyses found that EGMs are the form most strongly associated with problems, and the strength of this relationship did not differ significantly across jurisdictions. **Discussion:** Lower harm from gambling in WA is attributable to restricted accessibility of EGMs, rather than different structural features. There appears to be little transfer of problems to other gambling forms. These results suggest that restricting the accessibility of EGMs substantially reduces gambling harm.

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KEYWORDS

electronic gaming machines, gambling, gambling problems, gambling harm, accessibility, availability, gambling policy

INTRODUCTION

Problem gambling is recognised as a public health concern (Latvala, Lintonen, & Konu, 2019; The Lancet, 2017). Research has consistently found that electronic gaming machines (EGMs) are the gambling product most frequently associated with harmful gambling (M. Browne, Newall, et al., 2023; Delfabbro, King, Browne, & Dowling, 2020). A key question is whether this harm is primarily due to the product itself, or due to the product being attractive to vulnerable users. However, addressing this question is inherently difficult using traditional research methods such as surveys, experiments, and help-service data. This is because: 1) participation rates and gambling frequency vary between activities and need to be accounted for in assessments of gambling problems; 2) different gambling activities are attractive to different subgroups of people who may be more or less vulnerable to gambling harm; 3) people with gambling problems tend to gamble on multiple activities, which obscures the source of their problem; 4) experimental designs manipulating product features lack ecological validity; and 5) harmful gambling forms identified by treatment-seeking clients may not be reflective of the broader population since the former are self-selecting (Delfabbro et al., 2020; Dowling, Smith, & Thomas, 2005). To help overcome these confounds, the current study uses a natural policy experiment to compare gambling problems and harm between very similar jurisdictions, differing primarily with respect to restrictions on access to EGMs.

EGMs and gambling problems

Findings from representative surveys conducted internationally indicate that EGM gambling is the strongest predictor of problem gambling after controlling for other gambling forms. These studies include an analysis of 12 Australian gambling prevalence surveys ($N > 100,000$) (Delfabbro et al., 2020), an aggregated dataset of national and state-based Australian prevalence studies ($N = 71,103$) (M. Browne, Newall, et al., 2023), the Canadian Community Health Survey ($N = 23,592$) (Williams et al., 2021), and the Swedish Longitudinal Gambling Study ($N = 4,991$) (Binde, Romild, & Volberg, 2017). Moreover, based on a natural experiment in Norway ($N = 1,293$), a prospective study showed that gambling problems amongst EGM gamblers were reduced after a ban on EGMs, with little indication of product substitution (Lund, 2009). Most gambling help service clients also report EGMs as causing them most harm (Dowling et al., 2005; Rodda & Lubman, 2014). In two nationally representative Australian surveys, individuals experiencing gambling harm most frequently nominated EGMs as their most problematic gambling form (Hing et al.,

2014, 2021). Overall, due to high levels of participation, and high risk conditional on participation, the evidence consistently implicates EGMs as contributing to gambling harm more than any other form.

Numerous structural characteristics of EGMs are thought to facilitate persistence and dependency, particularly the variable ratio reinforcement schedule that encourages rapid uptake and continued repetitive behaviour (Ferster & Skinner, 1957). Other EGM gambling characteristics are also associated with heightened risk, including its continuous nature, high event frequency, visual and auditory cues, price and prize structures, tokenisation, features, and losses disguised as wins (Livingstone, 2017; Parke, Parke, & Blaszczynski, 2017). However, causal evidence is relatively weak since it is difficult to evaluate these characteristics in ecologically valid settings (Blank, Baxter, Woods, & Goyder, 2021; Parke et al., 2017).

Researchers have also noted the immersive environment provided by EGMs which facilitates trance-like absorption, a state players describe as “the zone” where they may lose track of money and time spent seeking to extend time out from life’s worries (Schüll, 2012). These dissociative effects can facilitate harmful EGM play, particularly amongst emotionally vulnerable individuals more prone to problem gambling (Blaszczynski & Nower, 2002). Research has consistently found higher rates of psychiatric disorders amongst gamblers (Dowling et al., 2015) and playing EGMs for emotional coping, amongst other reasons, is associated with problem gambling (MacLaren, Ellery, & Knoll, 2015).

Geographic accessibility appears to contribute to EGM-related harm. A positive relationship has been observed between the density of EGMs in an area and gambling problems (Shaffer, LaBrie, & LaPlante, 2004; South Australian Centre for Economic Studies, 2005a). However, a reduction of EGM numbers in some venues in Victoria Australia did not lead to a corresponding decrease in EGM expenditure, probably because the EGM reduction was too small to affect accessibility (South Australian Centre for Economic Studies, 2005a). Analyses examining the spatial distribution of EGMs have found residential proximity to EGM venues is independently associated with problem gambling (Young, Markham, & Doran, 2012a, 2012b). Further, in these studies, EGM venues in accessible locations and venues with more EGMs were most closely associated with gambling harm.

While it is widely assumed that increased gambling availability will increase gambling problems, this relationship is more nuanced and may depend on factors such as community vulnerability, the availability of different gambling products, and level of market saturation (Abbott, 2006, 2017; LaPlante & Shaffer, 2007). For example, the rapid expansion of EGMs and casino gambling was associated with an increased prevalence of gambling problems when these activities were newly legalised (Abbott, 2020; Shaffer, Hall, & Vander Bilt, 1999; Volberg et al., 2004). However, subsequent studies in more mature markets have challenged the linear relationship of this “exposure effect” (Abbott, 2006, 2020; LaPlante & Shaffer, 2007; Philander, 2019;



Shaffer, 2005). The “adaptation effect” suggests that individuals in an exposed population develop some resistance to gambling problems over time, due to factors including social learning, waning novelty effects and improved public health measures (LaPlante & Shaffer, 2007; Shaffer, 2005). An “adoption effect” has also been proposed, where newly introduced gambling products disproportionately attract early adopters who have a greater vulnerability to gambling problems; however, the prevalence of gambling problems amongst product users decreases over time as less vulnerable later adopters also start using the product (Hing, Rockloff, & Browne, 2023).

Although it is clear that engagement with EGMs is associated with gambling problems and harm, there is little direct evidence on whether or not reducing access to EGMs would reduce negative outcomes. A product-safety model would suggest that population gambling problems would be reduced should EGM accessibility be reduced; while a psychopathological model implies that vulnerable individuals might redirect their demand to other risky forms of gambling.

The current study

Australian jurisdictions are relatively homogenous with respect to regulation and access to gambling products. However, Western Australia (WA) is exceptional in that access to EGMs is restricted to one casino. In all other jurisdictions, a total of 192,768 EGMs can be accessed in 11 casinos, 2,953 hotels and 1,840 licensed clubs (Australasian Gaming Council, 2021). Outside of WA, placement of EGMs in hotels and clubs makes them highly accessible across metropolitan, suburban and regional geographical locations (Browne & Minshull, 2017).

In contrast, the sole casino in WA has 2,466 EGMs and 350 gaming tables (Australasian Gaming Council, 2021). It is located in the central business district of the capital city, Perth, in which approximately 79% of the state’s population resides (Australian Bureau of Statistics, 2021). However, the Perth metropolitan area stretches for approximately 150 km, so many residents do not have easy access to EGMs. In contrast, most Australians in other jurisdictions live within a few kilometres of an EGM venue (Young et al., 2012a). Of importance for making this comparison is that online EGMs cannot be legally provided to Australian residents. While accessible through illegally-provided offshore operators, only 0.3% of Australian adults engage in online EGM gambling (Hing et al., 2021). Other forms of gambling in WA are similar to the rest of Australia, with only minor differences (e.g., Keno is accessible online in other jurisdictions but not WA), allowing rigorous comparisons (Hing et al., 2021). EGMs in WA have some minor structural differences to EGMs in the rest of Australia which aim to reduce their potential harm. These structural differences primarily relate to a slightly slower maximum rate of play than other jurisdictions (3–5 s in WA vs 2.14 s in Victoria) and the substitution of rotating symbols on the screen as opposed to symbols attached to virtual reels that

fall vertically (Australian National Standard Working Party, 2016). The differentially low access to EGMs in WA compared to other Australian jurisdictions creates an opportunity to conduct a natural experiment to examine how reduced access to EGMs affects aggregate population gambling problems.

The primary aim of this study is therefore to examine whether restricted access to EGMs in WA is accompanied by reduced prevalence of gambling problems and harm to self and others compared to the rest of Australia. Addressing this aim indicates whether people who might otherwise experience gambling problems, but cannot easily access EGMs, will instead gamble on other forms and experience equivalent harm from them instead. Alternatively, a lower prevalence of gambling problems in WA in the context of reduced access to EGMs would indicate that EGMs contribute uniquely to gambling problems. A secondary aim of this study is to ascertain whether structural differences are reflected in lower prevalence of gambling problems amongst regular EGM players in WA compared to the rest of Australia.

METHODS

Recruitment

Exactly 15,000 respondents from all Australian jurisdictions, aged 18+, were recruited via random digit dial sampling, and completed a computer-assisted telephone interview. Mobile phone sampling was selected due to declining landline ownership in Australia (Roy Morgan, 2019), because the single frame methodology provided greater overall sample quality than a single landline or dual-frame sample. Full technical details for recruitment are published elsewhere (e.g., procedures for non-answered or engaged numbers or scheduling an appointment if the participant was busy, interviews with 66 non-English speakers, etc) (Hing et al., 2021). The cooperation rate (interviews completed when contact was made) was 10.2%, and response rate based on estimated eligibility of those who could not be contacted was 4.5%. The completion rate including calls where contact was not made was 3.8%. Completion time was approximately 10 min on average, depending on a respondent’s answers and subsampling.

Measures

Demographics and weighting questions. Respondents reported their age, or age bracket, gender (male, female, other), location by postcode or broader region (e.g., Sydney, New South Wales (NSW) other than Sydney), and whether they had regular access to more than one mobile phone. Respondents also provided their marital status, country of birth, main language spoken at home, level of education, and whether they were of Aboriginal or Torres Strait Islander status.

Jurisdiction of residence was determined from postcode or broader region data, and was the main independent variable. The analyses compared WA (unweighted $n = 1,440$) vs



all other jurisdictions in Australia combined (“rest of Australia”, unweighted $n = 13,560$).

Gambling behaviour. Respondents were asked whether they had taken part in each of 13 gambling forms during the preceding 12 months (see Table 1 for a list). Respondents who reported gambling on any of the 13 forms were asked if they had, in the last 12 months, used the Internet to gamble via an internet-connected device (e.g., smartphone, computer).

All past-year Internet gamblers were retained for further questions about their gambling. Non-Internet gamblers were randomly sampled for retention so that there was an approximately equal number of Internet and non-Internet gamblers in the final sample. This sampling strategy was employed for the original purposes of the data collection, which focused on understanding the prevalence of and risks associated with internet gambling (Hing et al., 2021). Respondents who had not gambled on any forms only completed further questions about gambling-related harm from gambling by others.

Problem gambling severity. Subsampled respondents (i.e., all Internet gamblers and an approximately equal number of non-Internet gamblers) completed the Problem Gambling Severity Index (PGSI) and the Short Gambling Harms Screen (SGHS, also known as the GHS-10). The PGSI (Ferris & Wynne, 2001) is a nine-item scale that assesses past-year gambling problems. Response options are never (0), sometimes (1), most of the time (2) and almost always (3). Respondents were classified based on the original cut-offs, consistent with how the PGSI is scored in Australia: non-problem gamblers (0), low-risk gamblers (1–2), moderate-risk gamblers (3–7) and ‘problem gamblers’ (8–27). Internal consistency was high (alpha and omega >0.85).

Gambling harms. The ten-item Short Gambling Harms Screen (M. Browne, Goodwin, & Rockloff, 2017) assesses gambling-related harms, with responses no (0) and yes (1). Item responses were summed for a total between 0 and 10. Internal consistency was high (alpha and omega >0.85). The SGHS has been criticised by Delfabbro and colleagues (Delfabbro, Georgiou, & King, 2021; Delfabbro & King, 2017), but these criticisms have been rebutted by the original authors (Latvala, Browne, Rockloff, & Salonen, 2021; Murray Boyle, Browne, Rockloff, & Flenady, 2021, 2022). The SGHS has also been shown to have strong psychometric performance (M. Browne, Delfabbro, et al., 2023), including by independent researchers (Dowling et al., 2021; Greenwood, Youssef, Merkouris, & Dowling, 2021).

Gambling harms from others. All subsampled respondents, as well as non-gamblers, were asked whether they had experienced harm from another person’s gambling in the last 12 months (no/yes).

Harmful forms. Respondents who reported any problems or harm from their own gambling, or from the gambling of others, were asked which form of gambling was the most harmful for them.

Weighting

Responses were weighted to align the sample with population data from the Australian Bureau of Statistics. Weighting variables were age, gender and location. An additional consideration was the number of mobile phones owned by the respondent, to account for any selection biases. Finally, for questions that were only asked of subsampled respondents, additional weights were calculated to correct for this subsampling (Hing et al., 2021).

Data analysis

Respondents from WA and the rest of Australia were compared in terms of demographics, gambling behaviour, gambling problems, gambling harm, and harm from others’ gambling, using chi-square tests of independence for categorical variables (with tests of proportions where required), or Mann-Whitney U tests for continuous variables. Mediation analyses were conducted using the lavaan package in R to determine whether the difference between WA and the rest of Australia regarding problem gambling severity was mediated by EGM participation, and participation on other common gambling forms.

Moderation analysis and simple slopes analysis were conducted to determine whether the relationship between EGM participation and problem gambling severity significantly differed between WA and the rest of Australia, and whether EGMs were associated with problem gambling severity in both WA and the rest of Australia. In addition, the moderation analysis was used to calculate the contribution of different forms to the aggregate amount of gambling problems in WA compared to other jurisdictions, using the same weights. Since gambling participation is a necessary causal element for the development of gambling problems, our first step was to construct a linear regression model of PGSI scores predicted using the frequency of participation in each form. The model intercept was excluded on theoretical grounds since gambling problems are assumed to be zero in the case of non-participation. Both PGSI and frequency (times per year) were transformed using $\log(x+1)$ to stabilise variance. Please see Appendix for skewness and kurtosis scores before and after the transformation. We re-ran analyses on non-transformed PGSI scores (not reported), to determine sensitivity to transformations, but found no substantive differences. We calculated the variance inflation factor (VIF) to test for multicollinearity. The largest VIF was for race betting (1.7), which was below conventional thresholds (~ 5). A nested model comparison was made with a moderation model (all gambling forms by jurisdiction) to check for non-homogeneous effects of form.

Ethics

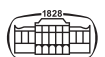
All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or



Table 1. Demographic, gambling behaviour and gambling problem and harm comparisons by jurisdiction

Variable	Measure	WA (<i>n</i> = 1,527)	Rest of Australia (<i>n</i> = 13,473)	Statistic	<i>p</i> Value	Effect size
<i>Demographics</i>						
Gender	% (n) female	50.4 (769)	51.0 (6,867)	$\chi^2(1) = 0.21$	0.650	
Age bracket	Median	45–49	45–49	$\chi^2(10) = -1.22$	0.213	
	Mean rank	7,407.65	7,552.24			
Marital status (<i>n</i> = 5,141)	% (n) married	48.1 (273)	44.0 (2,010)	$\chi^2(1) = 7.84$	0.098	
	% (n) de facto	14.4 (82)	16.4 (750)			
	% (n) widowed	2.6 (15)	3.9 (179)			
	% (n) divorced/ separated	13.2 (75)	11.5 (528)			
	% (n) never married	21.7 (123)	24.2 (1,106)			
Country of birth (<i>n</i> = 5,148)	% (n) not Australia	32.3 (183)	25.3 (1,160)	$\chi^2(1) = 12.65$	<0.001	$\phi = 0.05$
Aboriginal or Torres Strait Islander status (ATSI) (<i>n</i> = 5,129)	% (n) ATSI	3.2 (18)	2.7 (123)	$\chi^2(1) = 0.44$	0.506	
Main language at home (<i>n</i> = 5,143)	% (n) not English	14.5 (82)	16.2 (741)	$\chi^2(1) = 1.13$		
Education (<i>n</i> = 5,043)	Mean rank	2,358.19	2,521.45	M–W <i>U</i> = 1,090,798.5, <i>Z</i> = -2.50	0.012	<i>d</i> = 0.07
<i>Gambling behaviour</i>						
Gamblers	% (n) last 12 months	62.9 (961)	56.3 (7,580)	$\chi^2(1) = 24.91$	<0.001	$\phi = 0.04$
Online gamblers, amongst gamblers (<i>n</i> = 8,541)	% (n) last 12 months	28.6 (275)	31.0 (2,347)	$\chi^2(1) = 2.21$	0.137	
EGMs	% (n) last 12 months	8.7 (133)	17.3 (2,322)	$\chi^2(1) = 73.18$	<0.001	$\phi = 0.07$
Casino games	% (n) last 12 months	10.2 (155)	5.6 (749)	$\chi^2(1) = 51.04$	<0.001	$\phi = -0.06$
Lotteries	% (n) last 12 months	52.8 (804)	40.3 (5,424)	$\chi^2(1) = 87.44$	<0.001	$\phi = -0.08$
Scratchcards	% (n) last 12 months	17.8 (271)	15.5 (2,078)	$\chi^2(1) = 5.57$	0.018	$\phi = -0.02$
Keno	% (n) last 12 months	2.6 (40)	8.3 (1,121)	$\chi^2(1) = 62.54$	<0.001	$\phi = 0.07$
Sports betting	% (n) last 12 months	10.6 (162)	9.5 (1,280)	$\chi^2(1) = 1.96$	0.162	
Race betting	% (n) last 12 months	17.2 (263)	16.8 (2,262)	$\chi^2(1) = 0.17$	0.682	
Novelty betting	% (n) last 12 months	1.7 (26)	1.6 (211)	$\chi^2(1) = 0.16$	0.687	
Poker	% (n) last 12 months	3.3 (51)	3.5 (471)	$\chi^2(1) = 0.10$	0.750	
Bingo	% (n) last 12 months	2.0 (31)	2.4 (325)	$\chi^2(1) = 0.86$	0.353	
Esports betting	% (n) last 12 months	0.7 (10)	0.6 (83)	$\chi^2(1) = 0.03$	0.854	
Fantasy sports betting	% (n) last 12 months	1.0 (15)	0.5 (69)	$\chi^2(1) = 5.46$	0.019	$\phi = -0.02$
Skin gambling	% (n) last 12 months	0.5 (7)	0.5 (69)	$\chi^2(1) = 0.08$	0.779	
<i>Gambling problems and harm</i>						
Problem gambling severity amongst gamblers (<i>n</i> = 5,222)	% (n) non-problem	85.9 (505)	80.1 (3,713)	$\chi^2(3) = 13.30$	0.004	$\phi = 0.05$
	% (n) low-risk	9.4 (55)	11.8 (547)			
	% (n) moderate-risk	3.9 (23)	5.7 (266)			
	% (n) problem	0.9 (5)	2.3 (108)			
Problem gambling severity amongst gamblers (<i>n</i> = 5,222)	Mean (n) (SD)	0.39 (1.45)	0.68 (2.23)	M–W <i>U</i> = 1,488,043.5, <i>Z</i> = -3.59	<0.001	<i>d</i> = 0.07
Gambling harm amongst gamblers (<i>n</i> = 4,191)	Mean (SD)	0.40 (1.20)	0.55 (1.50)	M–W <i>U</i> = 771,669.5, <i>Z</i> = -2.16	0.030	<i>d</i> = 0.05
Harm from own gambling caused most by (<i>n</i> = 712)	% (n) EGMs	15.2 (10)	41.3 (267)	$\chi^2(14) = 35.93$	0.001	$\phi = 0.23$
Gambling harm from others’ gambling (<i>n</i> = 11,540)	% (n) yes	4.3 (50)	6.2 (645)	$\chi^2(1) = 7.22$	0.007	$\phi = 0.03$
Harm from others’ gambling caused most by (<i>n</i> = 650)	% (n) EGMs	13.3 (6)	53.9 (326)	$\chi^2(11) = 42.69$	<0.001	$\phi = 0.26$

Note: Bold text indicates statistically significantly higher values for WA or the rest of Australia. M–W *U* refers to Mann-Whitney *U*-tests. Omnibus test statistics are reported, with pairwise tests of independence also conducted after significant omnibus tests, for problem gambling severity and self-reported harmful forms associated with own or others’ gambling. **p* < 0.05, ***p* < 0.01, ****p* < 0.001.



comparable ethical standards. Ethics approval was obtained from the CQUniversity Human Research Ethics Committee, approval number 21992.

RESULTS

Demographic characteristics

Education was significantly lower in WA, and the proportion of people born in another country was significantly higher in WA, compared to the rest of Australia (Table 1). No other statistically significant differences were observed.

Gambling participation

Table 1 shows that a significantly higher proportion of respondents from WA gambled on at least one form during the last 12 months, but no significant difference was observed in terms of online gambling prevalence. Comparisons by each gambling form show that respondents from WA were significantly less likely to gamble on EGMs and Keno, but significantly more likely to gamble on lotteries, scratchcards, casino games and fantasy sports compared to the rest of Australia.

Gambling problems and harms

Gambling problems and gambling harms were significantly lower in WA, including the proportion in the highest risk group, as well as all risk levels combined (Table 1). People who experienced problems or harm from their own gambling in WA were significantly less likely to attribute their problems or harm to EGMs (15.2%) compared to the rest of Australia (41.3%). Instead, people in WA were significantly more likely to attribute their gambling harm to lotteries (24.2% vs 13.0% in the rest of Australia), and casino table games (21.2% vs 6.8% in the rest of Australia), with no other statistically significant differences.

A significantly lower proportion of people in WA reported experiencing harm from another person's gambling, compared to the rest of Australia. In the rest of Australia, 53.9% of those harmed by another person's gambling reported that EGMs were the form that caused the most harm compared to 13.3% in WA. In WA, the reported most harmful forms to concerned significant others (CSOs) were race betting (31.1% vs 18.5% in the rest of Australia) and casino table games (22.2% vs 5.6% in the rest of Australia), both of which were statistically significant.

Mediation models

Analyses were conducted to determine whether EGM participation in the last 12 months mediated the association between living in WA (or not) and (log +1) PGSI scores (Table 2). Because the PGSI was only asked of a subsample of those who reported gambling, corrective subsampling weights were applied ($N = 5,221$).

Model 1 included one mediator: EGM participation (no/yes). The negative total effect of jurisdiction on PGSI

Table 2. Mediation models predicting (log +1) PGSI scores

Mediator	Jurisdiction -> mediator	Mediator -> PGSI	Indirect effect	Direct effect	Variance explained
<i>Model 1: EGM participation</i>					
EGMs	-0.157*** (-0.202, -0.113)	0.347*** (0.318, 0.376)	-0.055*** (-0.071, -0.038)	0.012 (-0.019, 0.043)	0.281***
<i>Model 2: All forms</i>					
EGMs	-0.157*** (-0.202, -0.113)	0.265*** (0.206, 0.325)	-0.042*** (-0.057, -0.027)	0.012 (-0.028, 0.051)	0.372***
Keno	-0.250*** (-0.307, -0.193)	0.015 (-0.051, 0.082)	-0.004 (-0.021, 0.013)		
Lotteries	0.123*** (0.078, 0.168)	0.097* (0.022, 0.172)	0.012* (0.002, 0.022)		
Casino games	0.107*** (0.063, 0.151)	-0.043 (-0.132, 0.047)	-0.005 (-0.014, 0.005)		
Scratchcards	-0.034 (-0.075, 0.006)	0.050* (0.010, 0.090)	-0.002 (-0.004, 0.001)		
Sports betting	-0.019 (-0.058, 0.020)	0.216*** (0.135, 0.298)	-0.004 (-0.013, 0.004)		
Race betting	-0.032 (-0.071, 0.007)	0.005 (-0.072, 0.082)	0.000 (-0.003, 0.002)		
Novelty betting	0.018 (-0.046, 0.083)	-0.017 (-0.102, 0.067)	0.000 (-0.002, 0.002)		
Bingo	-0.047 (-0.125, 0.032)	-0.021 (-0.090, 0.049)	0.001 (-0.003, 0.005)		
Poker	0.000 (-0.055, 0.056)	0.074 (-0.018, 0.167)	0.000 (-0.004, 0.004)		
Esports betting	-0.031 (-0.110, 0.049)	0.046 (-0.069, 0.160)	-0.001 (-0.006, 0.004)		
Fantasy sports betting	0.057 (-0.017, 0.131)	-0.045 (-0.184, 0.094)	-0.003 (-0.011, 0.006)		
Skins gambling	-0.039 (-0.133, 0.055)	0.178* (0.037, 0.318)	-0.007 (-0.024, 0.011)		

Note: Values are standardised coefficients and 95% confidence intervals (lower limit, upper limit). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Independent variable was jurisdiction (rest of Australia = 0, WA = 1), and mediators were participating in each form within the last 12 months (no = 0, yes = 1). Total effect for Models 1 and 2 was beta = -0.043, 95% CI = -0.072 to -0.013, $Z = -2.813$, $p = 0.005$.



scores reflected lower levels of problems in WA. EGM participation fully mediated the direct effect, indicating that the lower PGSI scores in WA were explained by lower levels of EGM participation. Controlling for country of birth and education showed similar results (see [Appendix](#)).

Model 2 included participation in all 13 forms as parallel mediators. This model found a similar indirect effect for EGM participation, and also an indirect effect of the opposite sign for lotteries participation. No other indirect effects were statistically significant.

Moderation models

[Table 3](#) summarises two regression models predicting gambling problems from frequency of participation in each gambling form. Model 3 assumes a homogenous effect across jurisdictions conditional on participation, whilst model 4 provides for a baseline difference between jurisdictions not explained by participation, as well as differential effects of forms for WA versus the rest of Australia. Model 4 did provide a significantly better fit overall than Model 3, $F(10) = 1.306$, $p = 0.221$; and no interaction effects were significant. Accordingly, we concluded that the risk of gambling problems conditional on frequency of participation was approximately identical across jurisdictions. The riskiest form of gambling was EGMs, $B = 0.168^*$ (0.154, 0.182), $p < 0.001$.

DISCUSSION

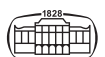
This study sought to determine how restricting the accessibility of EGMs impacts on population-level at-risk and problem gambling. Because EGMs are widely accessible across Australia, apart from WA, but other forms are similarly accessible in both WA and the rest of Australia, only problems attributable to EGMs are expected to be lower in WA, and not problems attributable to other gambling products. In line with previous research ([Lund, 2009](#)), our results found that gambling problems attributable to EGMs were lower in WA when compared to the rest of the country; approximately one-third of the total per capita. Moreover, this reduction contributed largely to Western Australians having only 65.4% of the total problems experienced by people living in other jurisdictions combined.

Our findings did not support potential substitution effects, whereby people might experience more problems from other gambling forms when EGMs are less accessible. In fact, gambling problems attributable to most other products were largely similar in WA compared to other jurisdictions. The exception was greater participation in WA for popular but less harmful products, such as lottery and scratchcards. There was greater participation in casino games in WA, but this contributed only marginally to greater problems from

Table 3. Regression coefficients for models predicting gambling problems conditional on frequency of participation on each form

	DV: log(PGSI+1)	
	Model 3	Model 4
Jurisdiction: WA (0), Rest of Australia (1)		0.043 ^{***} (0.025, 0.060)
Scratchcards	0.062 ^{***} (0.047, 0.076)	0.049 [*] (0.004, 0.094)
Sports betting	0.067 ^{***} (0.049, 0.085)	0.064 [*] (0.007, 0.120)
Race betting	0.050 ^{***} (0.035, 0.065)	0.071 ^{***} (0.024, 0.118)
Novelty betting	0.161 ^{***} (0.101, 0.221)	0.071 (−0.075, 0.217)
Bingo	0.004 (−0.030, 0.038)	−0.165 (−0.357, 0.027)
Keno	0.056 ^{***} (0.036, 0.076)	0.068 (−0.093, 0.229)
Poker	0.102 ^{***} (0.073, 0.131)	0.085 (−0.010, 0.179)
Casino games	0.149 ^{***} (0.117, 0.180)	0.163 ^{***} (0.075, 0.251)
EGMs	0.168 ^{***} (0.154, 0.182)	0.129 ^{***} (0.055, 0.204)
Scratchcards × Jurisdiction		0.003 (−0.045, 0.050)
Sports betting × Jurisdiction		−0.001 (−0.061, 0.059)
Race betting × Jurisdiction		−0.030 (−0.080, 0.020)
Novelty betting × Jurisdiction		0.107 (−0.054, 0.267)
Bingo × Jurisdiction		0.167 (−0.028, 0.363)
Keno × Jurisdiction		−0.015 (−0.177, 0.148)
Poker × Jurisdiction		0.017 (−0.082, 0.116)
Casino games × Jurisdiction		−0.017 (−0.111, 0.077)
EGMs × Jurisdiction		0.032 (−0.044, 0.109)
Observations	5,221	5,221
R ²	0.379	0.383
Adjusted R ²	0.378	0.381
Residual Std. Error	0.478 (df = 5,212)	0.477 (df = 5,202)
F Statistic	353.766 ^{***} (df = 9; 5,212)	170.071 ^{***} (df = 19; 5,202)

Notes: All gambling form independent variables and PGSI dependent variable transformed via log(+1). Lotteries were excluded on a theoretical basis because they were found to reduce harm. Esports betting, fantasy sports betting and skin gambling were excluded due to their low prevalence. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.



this source. These results imply that it is possible to reduce gambling problems by restricting accessibility of EGMs without people substituting to other problematic forms of gambling, as long as restrictions are meaningful. For example, a study examining the removal of 406 EGMs in parts of Victoria found no meaningful impacts on EGM expenditure (South Australian Centre for Economic Studies, 2005b). This is likely because 5,088 EGMs (93%) remained in these areas. If restrictions are to have a meaningful impact, numbers of EGMs must be reduced to a point where demand outstrips supply. If people do substitute to other gambling forms, they do not experience the same level of harm from them. These findings are in line with the international literature (e.g., Lund et al., 2009).

These findings also inform an important point about the nature of gambling harm. If gambling harm is mostly a function of the personal traits of people who gamble, then we would expect to see substitution of harms to other gambling forms when EGMs are less accessible. We did not find this substitution effect, which suggests that gambling harm is more likely due to the highly addictive nature of certain gambling forms, particularly EGMs, rather than personal predispositions.

People in WA were far less likely to indicate that EGMs had caused their gambling problems (15.2%) in comparison with those answering from other jurisdictions combined (41.3%). Only about one-third as many people attributed their gambling problems to EGMs, which converged with our estimate of about one-third as many problems per capita as estimated from our regression analyses. We also found that EGMs were less likely to be identified as the most harmful form of gambling in WA affecting CSOs. Thus, gambling problems from EGMs in WA were not just associated with rates of use of EGMs, but also directly identified as a less frequent source of problems by gamblers and their CSOs.

Due to differences in regulation, some unique structural features of EGMs in WA, apart from accessibility, could theoretically result in these games being less problematic than EGMs accessible in the rest of Australia. However, our results showed no significant predictive ability for playing EGMs in WA as a factor that was protective from gambling problems. That is, the primary reason that people in WA had less harm on average than other Australians related to their lower likelihood of using EGMs. However, people who used EGMs in WA were similarly as likely to suffer from gambling problems as people using EGMs elsewhere. These results imply that the particular differing structural features of EGMs in WA compared to other jurisdictions do not meaningfully reduce harm amongst people who play them. However, this should not be taken to mean that structural differences cannot reduce harm. In Norway, devices with less harmful features and mandatory identification of players has been associated with a decrease in harm, despite all but the most harmful EGMs still being widely accessible (Rossow & Bang Hansen, 2016). Instead, these findings imply that the particular structural characteristics of EGMs in WA are not different

enough to EGMs in the rest of Australia to meaningfully reduce harm.

Limitations

The present study had several limitations. Problems associated with individual gambling products were imputed by regression. This technique apportioned gambling problems as sourced from individual gambling products based on the frequency with which products were used by people with gambling related problems. Since people with problems are likely to use multiple products, some gambling harm from one product may merge into another in this process due to some multicollinearity in the predictors (i.e., the products used). For instance, people who play EGMs in WA may be more likely to also try casino games since they are both exclusively offered in the sole Casino. Thus, gambling problems associated with products are only estimates and ignore potential interactions between use of multiple products. Our convergent evidence taken from people nominating the gambling product that caused them the most harm ameliorated some concerns about our conclusions regarding the harm caused by EGMs. Nevertheless, asking people to nominate their most problematic product relies on people understanding the degree of harm each product contributes overall. Although this may seem reasonable, people with problems may have an imperfect understanding of what products contribute most to their problems. In addition, the data are drawn from self-report and may be limited based on recall and desirability biases. The low response rate raises questions about the representativeness of the data. However, the low response rate is in line with dropping response rates for telephone surveys across the world and is a limitation that is not unique to this study (Russell, Browne, Hing, Rockloff, & Newall, 2022). Further, the prevalence results for the current dataset are largely in line with previous representative samples in Australia, adding confidence to the findings (Browne et al., 2019; Hing et al., 2014; Rockloff et al., 2020). It is also unclear if the result is due to the limited number of EGMs in WA, or the fact that the EGMs are geographically isolated to one location. This is an avenue for future research.

Conclusion

The gambling environment of WA provides a unique natural experiment for analysing the potential for restriction in the accessibility of EGMs on the prevalence of gambling problems. The findings inform a broader public health debate about how accessibility of harmful gambling products relates to gambling harm. Using nationally representative data, it was found that the lower prevalence of play on EGMs was associated with a corresponding decrease in the gambling problems experienced by people living in WA relative to those living elsewhere in Australia. There was little evidence of substantial substitution of gambling behaviour to other harmful products. Consequently, this study indicates that restricting accessibility of harmful products can have a meaningful impact on decreasing the

prevalence of gambling problems in the community, inclusive of problems that occur to others in a close relationship with gamblers.

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Authors' contribution: AR devised the idea for the paper. AR and MB conducted all analyses and verified the underlying data. AR, NH, MB and MR wrote the first draft of the paper. NH led the overall project from which these data were drawn. NH, AR, MB, MR, NG, VR, MS, ND, SM, DK, HB, AHS and LW secured funding for the corresponding project. All authors were involved in the design of the overall project and survey instrument, critically edited the manuscript, and approved it for submission.

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MR has received research funds from Gambling Research Australia, Victorian Responsible Gambling Foundation, Queensland Treasury, Victorian Treasury, NSW Responsible Gambling Fund, NSW Office of Liquor & Gaming, Tasmanian Department of Treasury and Finance, New Zealand Ministry of Health, Department of Families, Housing, Community Services and Indigenous Affairs, Alberta Gambling Research Institute and the First Nations Foundation. He declares no conflicts of interest in relation to this manuscript.

PN is a member of the Advisory Board for Safer Gambling – an advisory group of the Gambling Commission in Great Britain, and in 2020 was a special advisor to the House of Lords Select Committee Enquiry on the Social and Economic Impact of the Gambling Industry. In the last three years PN has received research funding from Clean Up Gambling, and has contributed to research projects funded by GambleAware, Gambling Research Australia, NSW Responsible Gambling Fund, and the Victorian Responsible Gambling Foundation. In 2019 PN received travel and accommodation funding from the Spanish Federation of Rehabilitated Gamblers, and in 2020 received an open access fee grant from Gambling Research Exchange Ontario. Philip declares no conflicts of interest in relation to this manuscript.

Over the past 3 years, ND has received research funding from multiple sources, including government bodies (through hypothecated taxes from gambling revenue): the Swedish Gambling Research Council, the Health Research Council of New Zealand, the Victorian Responsible Gambling Foundation, the New South Wales Office of Responsible Gambling, Gambling Research Australia, the New Zealand Ministry of Health and the International Center for Responsible Gaming (with funding decisions the responsibility of a scientific advisory board). She has not knowingly received research funding from the gambling, tobacco, or alcohol industries or any industry-sponsored organisation.

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HB is retired and an Adjunct, Faculty of Business, Law and Arts Southern Cross University, Australia. She has had several casual work contracts with Central Queensland University, Australia. She declares no conflicts of interest in relation to this manuscript.

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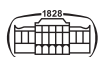
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Appendix

Table A1 below shows the version of the mediation models in Table 2 when controlling for demographics. As shown, the results are similar to those for Model 1, and the interpretation of the results is the same.

Table A2. Skewness and kurtosis (and standard errors) of PGSI before and after log(+1) transformation

Statistic	Original PGSI score	Transformed PGSI score
Skewness	5.02 (0.03)	2.31 (0.03)
Kurtosis	31.34 (0.07)	4.93 (0.07)

Table A1. Mediation models predicting (log +1) PGSI scores

Mediator	Jurisdiction -> mediator	Mediator -> PGSI	Indirect effect	Direct effect	Variance explained
Model 3: EGM participation plus demographics	.	.	.	0.005 (−0.025, 0.036)	0.265***
EGMs	−0.160*** (−0.205, −0.116)	0.320*** (0.289, 0.351)	−0.051*** (−0.067, −0.036)	.	.

Note: Values are standardised coefficients and 95% confidence intervals. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Independent variable was jurisdiction (rest of Australia = 0, WA = 1), and mediator was participating on EGMs within the last 12 months (no = 0, yes = 1).

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SUMMARY OF BASELINE SITUATION

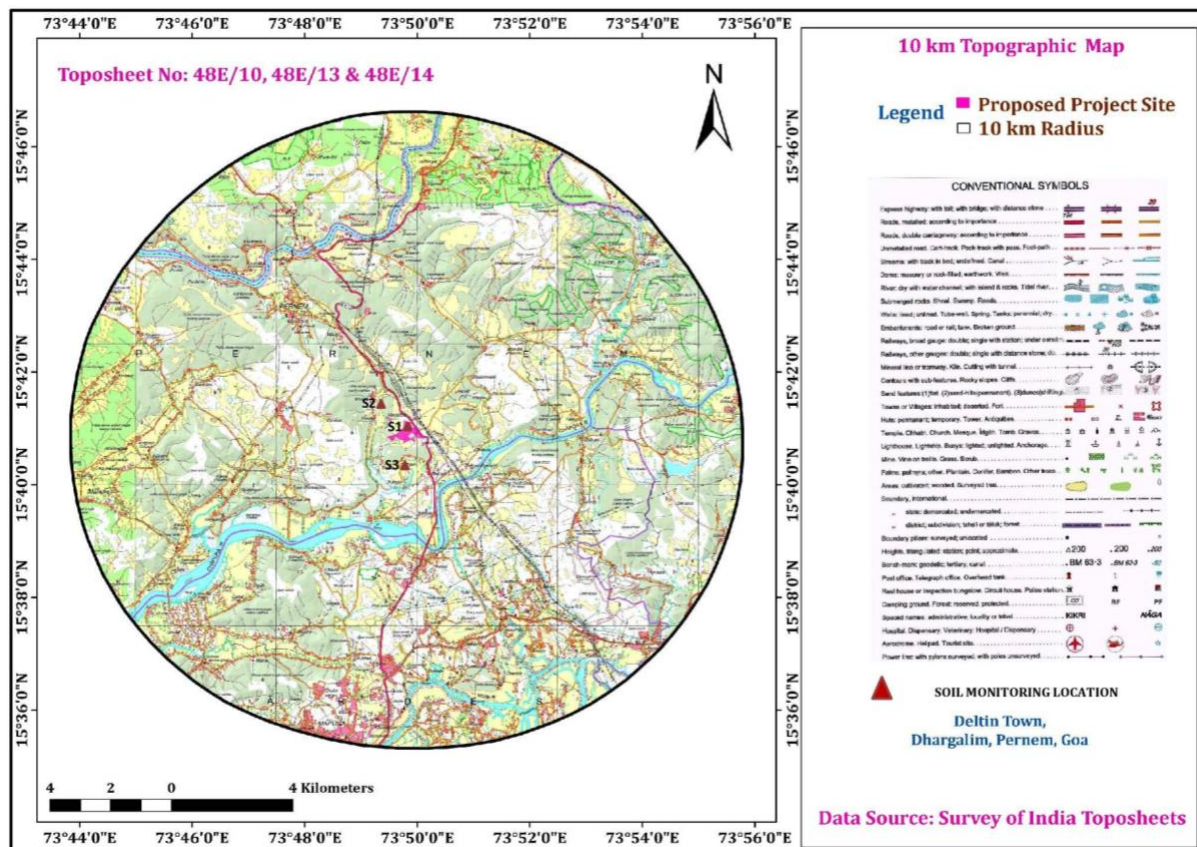
The baseline studies have been carried out for three months representing Pre-monsoon season (March 2022 to May 2022). The details are as follows:

LAND USE

As per satellite imagery for the study area of 10km radius, the built-up land is 3.30%, forest land occupies 33.15%, agricultural land is about 12.57 %, water body is 4.18% and remaining land is either area available for cultivation or cultivable waste land.

SOIL CHARACTERISTICS

Sl. No	Location Code	Monitoring locations (Soil)	Distance from the Project boundary (km)	GPS Coordinate		Direction respect to project site
				Latitude	Longitude	
1	S1	Project Site	-	15°40'55.40"N	73°49'38.68"E	-
2	S2	Virnora Village	0.80 km	15°41'3.38"N	73°49'10.81"E	North West
3	S3	Dhargal Village	0.74 km	15°40'20.72"N	73°49'42.16"E	South West



The pH of the soil samples varied from 7.26 to 8.14 indicating slightly alkaline, Bulk density of the soil samples varied from 1.80 to 2.21 g/cm³, Organic carbon in the soil samples varied from 0.78 to 1.3 %, Total Nitrogen in the soil samples varied from 143.3 to 180.8 mg/kg. Potassium in the soil samples varied from 210.5 to 257.4 mg/kg. Water Holding Capacity (WHC) in the soil samples varied from 37.6 to 40.5%.

METEOROLOGY

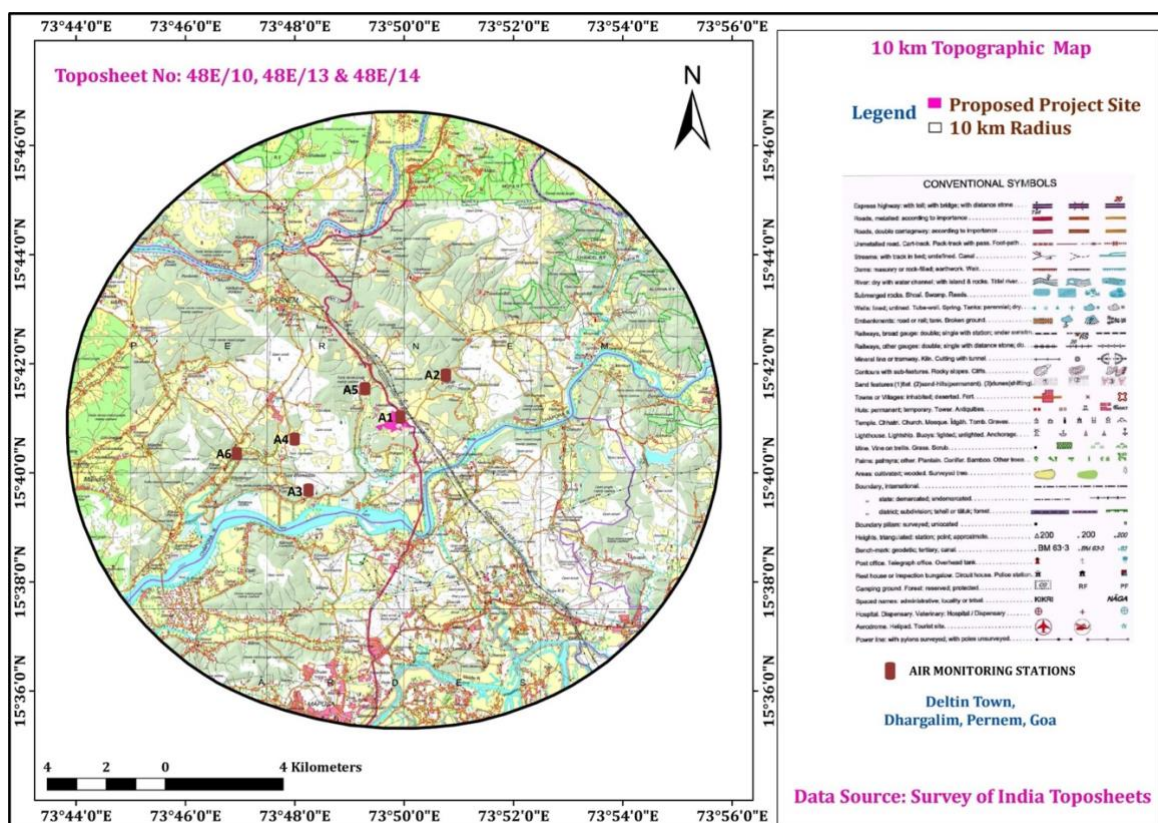
S1. No	Parameters		March 2022	April 2022	May 2022
1	Temperature (°C)	Max	34.0	34.3	34.8
		Min	21.7	24.0	24.3
		Avg	27.6	28.0	28.5
2	Relative Humidity (%)	Max	95.0	96.0	98.0
		Min	48.0	50.0	58.0
		Avg	72.0	76.0	78.0
3	Wind Speed (mph)	Avg	2.1	2.8	3.0
4	Wind Direction	-	NE	NEE	NEE

Pre-monsoon Season

Temperature ranged from 21.8°C to 35.1°C and the average relative humidity recorded in the range of 74% to 75%. Total rainfall observed was 57.5 mm during the study period. Predominant winds are mostly from NE to NEE direction.

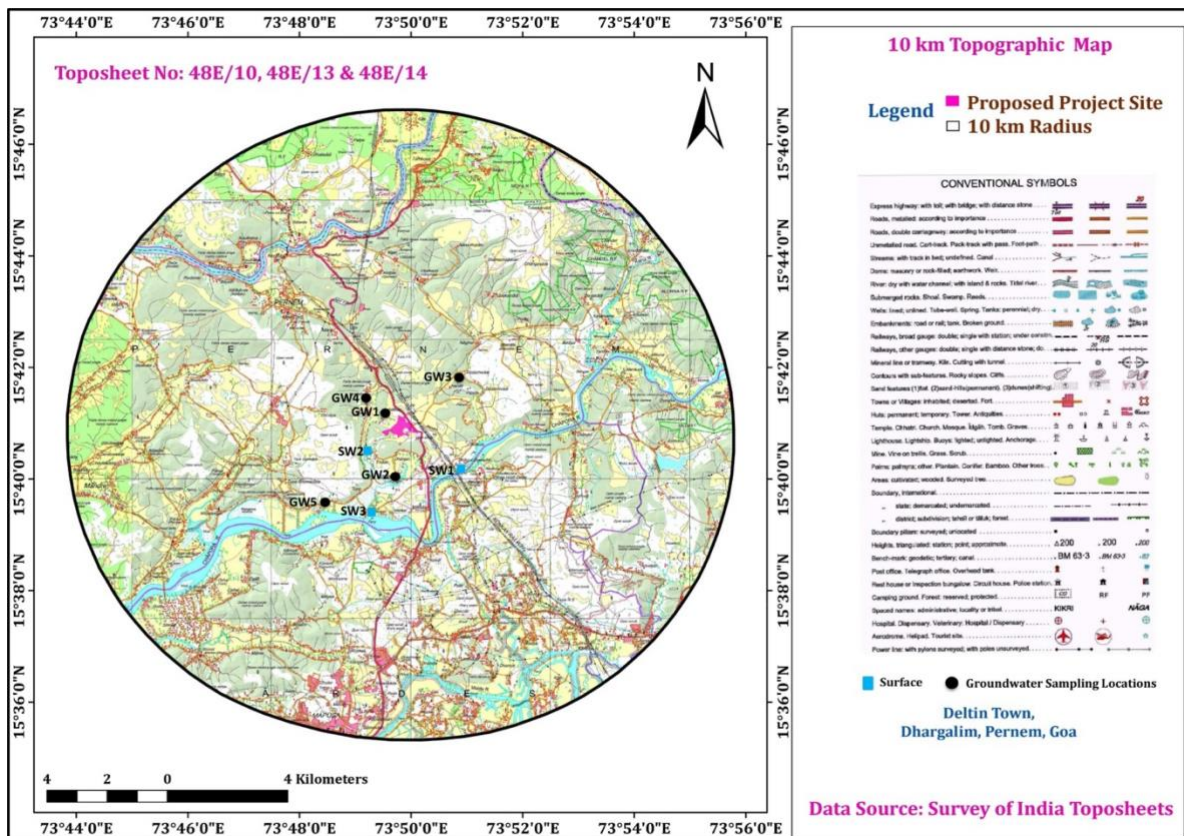
AMBIENT AIR QUALITY

S. No.	Station Code	Monitoring Locations	Distance from the Project boundary (km)	GPS Coordinate		Direction respect to project site
				Latitude	Longitude	
1	A1	Project Site	-	15°41'1.57"N	73°49'46.63"E	-
2	A2	Dadachiwadi Dhargalim	1.71	15°41'40.37"N	73°50'39.36"E	NE
3	A3	Tuem village	3.3	15°39'39.76"N	73°48'7.01"E	SW
4	A4	Halmarkawada, Tuem	2.9	15°40'27.82"N	73°47'51.47"E	W
5	A5	Oshalbag village	0.38	15°41'7.80"N	73°49'31.88"E	N
6	A6	Parcem village	5.1	15°40'6.29"N	73°46'44.87"E	W



Six ambient air quality locations were monitored in and around project site. The minimum and maximum concentrations for PM₁₀ were recorded as 41.09 µg/m³ and 50.26 µg/m³. The minimum and maximum concentrations for PM_{2.5} were recorded as 22.54 µg/m³ and 29.54 µg/m³ respectively similarly SO₂ minimum and maximum concentrations were recorded as 5.81 µg/m³ and 9.80 µg/m³ while NO₂ minimum and maximum concentrations were recorded as 17.71 µg/m³ and 22.75 µg/m³.

WATER QUALITY



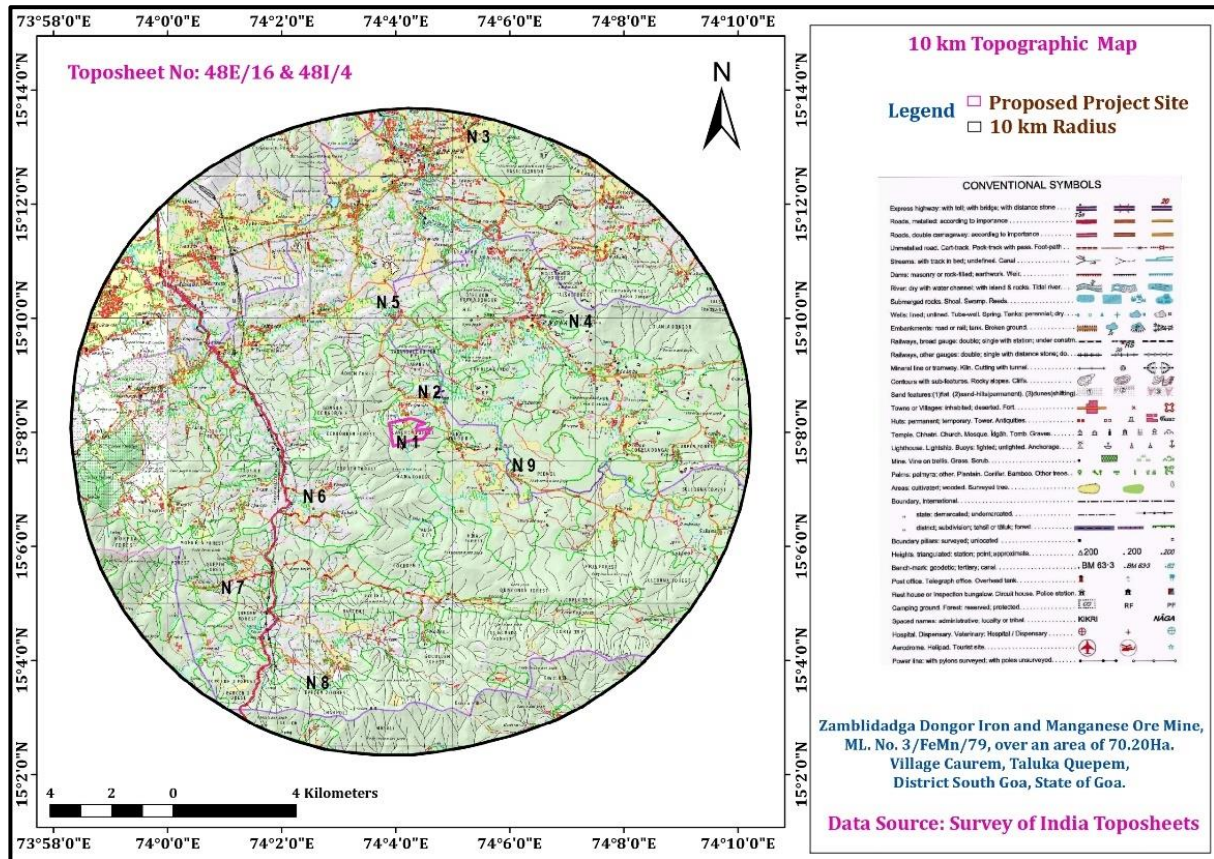
Sr. No.	Station Code	Monitoring Locations	Distance (Km)	Direction	GPS Coordinate		Source
					Latitude	Longitude	
1	GW1	Oshalbag village	0.38	N	15°41'7.80"N	73°49'31.88"E	Dug well

Sr. No.	Station Code	Monitoring Locations	Distance (Km)	Direction	GPS Coordinate		Source
					Latitude	Longitude	
2	GW2	Dhargal village	1.35	S	15°39'59.68"N	73°49'39.70"E	Dug well
3	GW3	Dadachiwadi Dhargalim	1.74	NE	15°41'39.82"N	73°50'41.15"E	Dug well
4	GW4	Virnora village	0.77	NW	15°41'10.57"N	73°49'10.48"E	Dug well
5	GW5	Tuem village	3.63	SW	15°39'25.85"N	73°48'3.05"E	Dug well
Surface Water							
1	SW1	Chapora river-upstream	1.73	SE	15°40'7.28"N	73°50'50.58"E	River
2	SW2	Tributary of chapora river	1	W	15°40'24.02"N	73°49'9.10"E	River
3	SW3	Chapora river-Downstream	3.33	SW	15°39'21.60"N	73°48'23.72"E	River

The baseline water quality status in the region is established by analysing samples collected from 8 locations consisting of Five ground water samples and three surface water samples. The ground and surface water samples were analysed and found that ground water quality is well within the drinking water quality limits and surface water has been found to be suitable for drinking after the conventional treatment followed by disinfection.

1.3.6 NOISE LEVELS

S. No.	Station Code	Monitoring Locations	Distance from the Project boundary (km)	GPS Coordinate		Direction respect to project site
				Latitude	Longitude	
1	N 1	Project Site	-	15°41'1.57"N	73°49'46.63"E	-
2	N 2	Dadachiwadi Dhargalim	1.71	15°41'40.37"N	73°50'39.36"E	NE
3	N 3	Tuem village	3.3	15°39'39.76"N	73°48'7.01"E	SW
4	N 4	Halmakawada, Tuem	2.9	15°40'27.82"N	73°47'51.47"E	W
5	N 5	Oshalbag village	0.38	15°41'7.80"N	73°49'31.88"E	N
6	N 6	Parcem village	5.1	15°40'6.29"N	73°46'44.87"E	W



The noise monitoring has been conducted for determination of noise levels at six locations in the study area. Noise monitoring results reveal ambient noise levels in all the locations are well within the limits as per CPCB ambient noise standards.

1.3.7 FLORA AND FAUNA

Off the observed 111 plant species during summer studies there is no IUCN assessment information 65 species whereas 42 species are assessed as Least Concern & assessment of 1 species being Data Deficient is an indicative of observed plant species being of extreme common in nature except for 2 Vulnerable species viz. *Garcinia indica*, & *Dalbergia latifolia* and 1 Endangered species viz. *Tectona grandis*.

Of the primary observed fauna viz. 47 bird species, 12 reptile species & 11 mammal species, the IUCN assessment except for that of 43 bird species is Least Concern and 1 bird species viz. Indian peafowl is listed in Schedule I of WPA 1972. Though Indian peafowl being listed Schedule I species, observed species are common in nature and had very wide range of presence & abundance across the North Goa district.

Date: 28/04/2022

To

The Member Secretary
Goa SEIAA/SEAC
Department of Environment and Climate Change
4th Floor, Dempo Towers, Patto Plaza,
Panaji, Goa

Subject: Application for obtaining Terms of Reference (ToR) for prior Environmental Clearance for proposed construction of Integrated resort project "Deltin Town" at Village Dhargalim, Pernem-Goa.

Respected Sir/Madam,

We have proposed to develop an Integrated resort project at Survey Nos. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A, 280/1-B of Village Dhargalim, Pernem, Goa. In this regard, we are applying for grant of Terms of Reference for Environmental Clearance along with requisite documents.

We request you to kindly grant us the Terms of Reference.

Thanking you

For Delta Corp Limited



Authorized Signatory


True copy**Goa Office :**

C/o Delta pleasure Cruise Comp. Pvt. Ltd,
Fisheries Jetty, Gr. Floor, D.B. Bandodkar Rd.,
Panjim, Goa - 403 001

P : 0832 2433200
F : 0832 2433201

Regd. Office :

10, Kumar Place, 2408,
General Thimayya Road,
Pune - 411 001.

P: 020 41207787

Mumbai Office :

109, Bayside Mall, 2nd Floor, Tardeo Road,
Haji Ali, Mumbai - 400 034.

P : +91 22 4079 4700
F : +91 22 4079 4777

Minutes of the 151st meeting of Goa State Expert Appraisal Committee (Goa-SEAC) held on the 01st June 2022 at 03.30 p.m. in the conference hall, 4th Floor, Dempo Towers, Patto - Panaji, Goa.

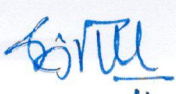
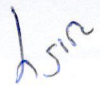
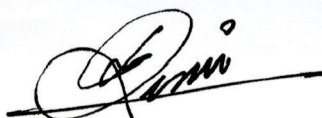
The 151st meeting of the Goa-SEAC was held on 01st June 2022 in the Conference room 4th floor of the Dempo Towers, Patto-Panaji at 03.30 p.m. under the Chairmanship of Shri. Gautam Desai. The list of members who attended the meeting is at "Annexure – I".

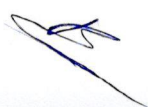
The Chairman welcomed the members and requested Secretary, SEAC to proceed as per the agenda items (refer Annexure – 2).

- 1. To decide on application (ToR) from Deltin Town located at Plot bearing Survey No. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1, 280/1-A and 280/1-B, Dhargalim Village, Pernem Goa.**

Decision: After scrutinizing the documents submitted by the Project Proponent, the Committee decided to grant the following ToR.

1. Baseline Environment Quality monitoring-Air, Noise, Water & soil.
2. Modeling, simulation & prediction of incremental pollutant load due to project activity.
3. Study of existing architectural drawings of project & suggesting modifications to achieve sustainable environmental features in the project.
4. Assessment of design of Sewage treatment plant, rain water harvesting plan for the project site if already implemented, if not, suggesting the plan for implementation.
5. Performance evaluation of Sewage Treatment Plant.
6. Ecology & Biodiversity studies.
7. Assessment of landscape plan & suggesting modification if any as per Environmental Clearance requirement.
8. Damage Assessment from the project activity carried out.
9. Existing energy plan vs modification in line with environmental clearance standards.
10. Deriving appropriate remedial plan.
11. Deriving environmental management plan.

2. To decide on application (ToR) from Vagxepe Damdo Amabeya Temb Iron Ore Manganese Ore Mine located at Plot bearing Survey No. 87, 88, 89, 90, 91, 104, 105, 106, 107, 108, 109, 110, 111, 114 and 117 Molcornem, Goa.

Decision: The representative of Vagxepe Damdo Amabeya Temb Iron Ore Manganese Ore Mine appeared before the Committee and Shri Vivek Navre presented the details of the Project, after scrutinizing the documents submitted by the Project Proponent, the Committee decided not to recommend the said proposal for grant of ToR since the proposal is not for expansion, as the previous Environmental Clearance granted is not valid as on this date.

The meeting ended with a vote of thanks to the chair.

Dr. Benjamin Braganca



Dr. Dipak C.S. Gaitonde

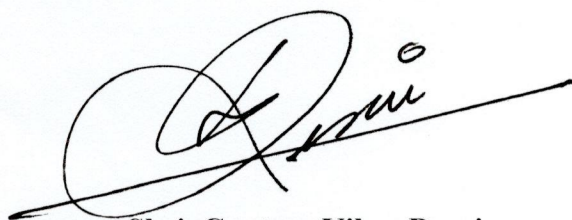


Shri. Sanjay Amonkar



Dr. Chandrasheker U. Rivonker





Shri. Gautam Vikas Desai
(Chairman Goa-SEAC)



Shri. Sanjeev Joglekar
(Secretary Goa-SEAC)

Place: Patto-Panaji
Date: 01 June 2022

Annexure – 1

Shri Gautam Vikas Desai	Chairman(Goa –SEAC)
Shri. Sanjeev Joglekar	Secretary(Goa –SEAC)
Dr. Benjamin Braganca	Expert Member(Goa –SEAC)
Dr. Dipak C.S. Gaitonde	Expert Member(Goa –SEAC)
Shri. Sanjay Amonkar	Expert Member(Goa –SEAC)

Annexure - 2**Agenda Items for 151th Goa State Expert Appraisal Committee (Goa – SEAC) meeting held on 06th June 2022 at 03:30 pm.**

1. To decide on application (ToR) from Deltin Town located at Plot bearing Survey No. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1, 280/1-A and 280/1-B, Dhargalim Village, Pernem Goa.
2. To decide on application (ToR) from Vagxepe Damdo Amabeya Temb Iron Ore Manganese Ore Mine located at Plot bearing Survey No. 87, 88, 89, 90, 91, 104, 105, 106, 107, 108, 109, 110, 111, 114 and 117 Molcornem, Goa
3. Any other matter with permission of the chair.



MINUTES OF THE 80th GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (GOA-SEIAA) MEETING HELD ON 13/06/2022 AT 03.30 P.M. IN THE CONFERENCE ROOM OF THE 4th FLOOR, DEMPO TOWER, PATTO, PANAJI-GOA.

The Eightieth meeting of the Goa - SEIAA (*hereinafter referred as 'Authority'*) was held on 13th June 2022 at 03.30 pm in the conference room, 4th floor, Dempo Tower, Patto, Panaji. The list of members present during the meeting is annexed (*refer Annexure – 1*).

At the outset, Chairman welcomed Authority members and briefed about the agenda items (*refer Annexure – 2*) to be taken up for discussion / deliberations and suitable decision. Accordingly, the same were considered as detailed below.

- 1. To decide on application (ToR) from Deltin Town located at Plot bearing Survey No. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A and 280/1-B, Dhargalim village, Pernem Goa.**

Decision: After discussion and considering recommendation by the Goa-SEAC the Authority, members unanimously decided to grant the following ToR:-

1. Baseline Environment Quality monitoring-Air, Noise, Water & soil.
2. Modeling, simulation & prediction of incremental pollutant load due to project activity.
3. Study of existing architectural drawings of project & suggesting modifications to achieve sustainable environmental features in the project.
4. Assessment of design of Sewage treatment plant, rain water harvesting plan for the project site if already implemented, if not, suggesting the plan for implementation.
5. Ecology & Biodiversity studies.
6. Assessment of landscape plan & suggesting modification if any as per Environmental Clearance requirement.
7. Existing energy plan vs modification in line with environmental clearance standards.
8. Optimum use of space should be done to install solar panels in order to reduce the load of electricity consumption.
9. Installation of Solid Waste Treatment Plant on site.

- 2. To decide on application (ToR) from Vagxepe Damdo Amabeya Temb Iron Ore Manganese Ore Mine located at Plot bearing Survey No. 87, 88, 89, 90, 91, 104, 105, 106, 107, 108, 109, 110, 111, 114 and 117, Molcornem, Goa.**

Decision: After scrutinizing the documents submitted by the Project Proponent, the Authority decided to reject the said proposal for grant of ToR since the proposal is

not for expansion, as the previous Environmental Clearance granted is not valid as on this date. The Authority asked the PP to apply for the fresh EC along with the lease.

3. To decide on the application received from Marvel Resorts Private Limited for expansion at P.T. Sheet No. 121/Chalta No. 2,3,4,38,39 and P.T. Sheet No. 130/Chalta No. 33, St. Inez, Tiswadi, North Goa for prior EC.

Decision: After discussion and considering recommendation by the Goa-SEAC, the Authority members unanimously decided to grant the Environmental Clearance under provision of EIA Notification 2006 (as amended) with following conditions:-

- a) The PP should use Ready-Mixed Concrete (RMC) to minimize air/ water/ land pollution and water usage during the construction phase.
- b) PP should adopt roof-top rainwater harvesting/ conservation measures to optimally utilize the water availability by constructing sumps for collection of rainwater as per the site-specific location details provided.
- c) PP should not disturb the natural drainage and as far as possible and maintain the original topography while designing for landscape development by planting local plant species and which are not alien to the prevailing environment.
- d) PP should clarify any issue related to public objections, if any, and should not conceal the scientific facts in light of the proposed developmental activity vis-à-vis its landuse categorization/ zoning.
- e) PP should submit half-yearly compliance report(s) in hard as well as soft copy format to the Authority for the period upto project completion.
- f) This environmental clearance is issued subject to obtaining NOC from the Forestry & Wildlife angle including clearance from the Standing Committee of the National Board for wildlife, if applicable. The grant of environmental clearance does not necessarily imply that Forestry & Wildlife clearance has been granted to the project, which has to be dealt separately by the competent authorities in accordance with law.
- g) The height, construction gross built up area of proposed construction is **43534.60 Sq.mts** shall be in accordance with the existing FSI/ FAR norms of the local body and planning authorities and it should ensure the same along with survey number before approving layout plan and before according commencement certificate to proposed work, Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
- h) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- i) 'Consent to Establish' shall be obtained from the Goa State Pollution Control Board (GSPCB) under Air Act and Water Act, as applicable and a copy shall be submitted to the Authority within 30 days of starting construction work at site.
- j) Permission to draw groundwater, as applicable, shall be obtained from the Groundwater Cell of the Water Resources Department (WRD) Government of Goa.
- k) Project proponent shall not make any change in the Surface Layout Plan/ Civil Plan submitted to the Authority without its prior permission. **In case of any change(s) in the scope of the project and/or otherwise, the project proponent needs to inform this Authority.**
- l) Project proponent shall make suitable provisions for sewage/ waste water disposal

and storm water release independently.

- m) CNG powered generating sets to be used during construction.
- n) The PP will lay a direct line for disposal of sewage to the STP at Tonca of PWD. The PP will also lay a line for drawal of treated sewage upto 20 kld for reuse for flushing, gardening, floor washing and car washing. The PP will construct a treated water tank and also install a Ultra filtration unit for ensuring reuse of treated water.
- o) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and first aid room etc.
- p) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of waste water and solid waste generated during the construction phase should be ensured.
- q) The solid waste generated should be properly segregated. Dry/ inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
- r) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved site with the approval of competent authority.
- s) Arrangements shall be made that waste water and storm water do not get mixed.
- t) All the top soil excavated during construction activities should be stored if or use in horticulture/ landscape development within the project site.
- u) Additional soil for levelling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- v) Green-belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the State Forest/ Agriculture Department.
- w) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- x) Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate water courses and the dump sites for such materials must be secured so that they should not leach into ground water.
- y) Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary authorisation of the GSPCB.
- z) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standard and should be operated during non-peak hrs.
- aa) Ambient noise levels should conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level construction phase, so as to conform to the stipulated standard by CPCB/ GSPCB.

- bb) The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquakes, adequacy of fire fighting equipment etc. as per National Building Code (NBC) including measures from lighting.
- cc) Storm water controlled and its re-use as per Central Ground Water Board (CGWB) and Bureau of Indian Standards (BIS) for various applications.
- dd) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- ee) The groundwater level and its quality should be monitored regularly in consultation with ground water authority of the Water Resources Department (WRD), Government of Goa.
- ff) Use of glass may be reduced upto 40% to reduce electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- gg) Roof should meet prescriptive requirement as per energy conservation building code by using appropriate thermal insulation material.
- hh) Energy conservation measures like installation of only for LEDs' for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used of LED's, if any, should be properly collected and disposed off / sent for recycling as per the prevailing guidelines / rules of the regulatory authority to avoid mercury contamination.
- ii) Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- jj) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalised and no public place should be utilised.
- kk) Opaque wall should meet prescriptive requirement as per energy conservation board which is proposed to mandatory for all air conditioned spaces while it is aspiration for non- air conditioned spaces by use of appropriate thermal insulation material to fulfil requirement.
- ll) The buildings should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
- mm) Regular supervision of the above and other measures for monitoring should be in placed all through the construction phase, so as to avoid disturbance to the surroundings.
- nn) Under the provisions of Environment Protection Act 1986, legal action shall be initiated against the PP if it was found that construction of the project has been started without obtaining EC.
- oo) Six monthly compliance reports should be submitted to the MoEF&CC with copy to the Goa-SEIAA and GSPCB.

2. Further, the Committee decided to direct the PP to comply with the following **"General Conditions" during post-construction phase:-**

- a) Biodegradable waste shall be treated in Biogas plant and the Biogas shall be utilised for

cooking within the residential complex. Local authority should ensure compliance to this.

- b) Separate funds shall be allocated for implementation of environmental protection measures /EMP along with item wise breaks-up. The funds earmarked for the environment protection measures shall not be diverted for other purposes.
 - c) The PP shall upload the status of the compliance of the stipulated EC conditions, including results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF & CC, the respective Zonal office, CPCB and the GSPCB. The pollutant levels in respect of SPM, RSPM, SO₂ and NO_x (*ambient levels as well as D.G. stack emissions*) shall be monitored.
 - d) Consent to Operate shall be obtained from GSPCB before operation, failing which the Environmental Clearance herein shall be deemed to be withdrawn.
 - e) The PP should provide facilities for storage of dry waste, domestic hazardous waste in consultation with the local body and the Goa State Pollution Control Board.
 - f) Noise should be controlled to ensure that it does not exceed the prescribed standards both during day & night time.
 - g) The ground water drawl from existing/proposed bore wells if any should be done only with the prior permission of Ground Water Board. The ground water level and its quality should also be monitored regularly both during construction and operation phase in consultation with Ground Water Board.
 - h) Traffic congestion near the entry and exit points from the roads adjoining the project site must be avoided. Parking should be fully internalized and no public space should be utilized.
 - i) Energy Conservation measures such as solar lighting for common area, solar water heating system, LED's for lighting of areas, LED lights for signage, solar inverters on the etc should be adopted.
 - j) Used LED lights should be properly collected and disposed off/ sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
 - k) A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors etc and submit to the State Expert Appraisal Committee and a copy to GSPCB in three months time.
3. Further this EC is issued without prejudice to the action initiated in the Environment (*Protection*) Act or any court case pending in the court of law. As such, it does not mean that the PP has not violated any environmental laws in the past and whatever decision under the said Act by the Hon'ble Court will be binding on the PP. **Hence, this environmental clearance does not give immunity to the PP in the case complaint is filed against, if any, or action initiated under the said Act.**

4. Specific Conditions

- a. The approach road leading to the site should be constructed prior to commencement of any construction activity at site as per the regulations of the Town & Country Planning Department.
- b. PP should take a note that rainwater discharge should be allowed towards the downstream of the nallah.

- c. PP should prioritize the issues related to health and hygiene in complying with the matters related to waste disposal and treatment / air and water pollution / waste-water management.
- d. PP needs to ensure that no treated water or any waste sewage shall be discharged into any water body. E-waste shall be disposed through Authorised vendor as per E-waste (*Management and Handling*) Rules, 2011.
- e. Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels towards south facing walls as and when made applicable in future.
- f. The Project Proponent shall utilise fly ash bricks in masonry works.
- g. At least 20% of the open spaces as required by the local building bye-laws shall be previous. Use of Grass pavers, paver blocks with at least 50% opening, landscape etc. would be considered as previous surface.
- h. Compliance with the Energy Conservation Building Code (ECBC) of Bureau of Energy Efficiency shall be ensured. Buildings in the States which have notified their own ECBC, shall comply with the State ECBC. Outdoor and common area lighting shall be LED. Concept of passive solar design that minimize energy consumption in buildings by using design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design and thermal mass etc. shall be incorporated in the building design. Wall, window, and roof u-values shall be as per ECBC specifications.
- i. Use of water saving devices/ fixtures (viz. low flow flushing systems; use of low flow faucets tap aerators etc) for water conservation shall be incorporated in the building plan.
- j. Installation of dual pipe plumbing for supplying fresh water for drinking, cooking and bathing etc and other for supply of recycled water for flushing, landscape irrigation, car washing, thermal cooling, conditioning, etc. shall be done.
- k. Separation of grey and black water should be done by the use of dual plumbing system. In case of single stack system separate re circulation lines for flushing by giving dual plumbing system be done.
- l. The project proponent will provide landscape bed of 600mm wide X 600mm deep along the periphery of the plot to carry out plantation of trees. The treated water will be pumped through high flow drips on these beds to prevent outflow of treated sewage water outside the premises.
- m. Areas which are marked as **No Development Zone (NDZ)** should be year marked on site and no construction shall be carried out in the said NDZ. Land Profile of NDZ shall not be altered.
- n. No construction shall be done over the portion of land, shown as open space in the site plan.
- o. PP should obtain all the requisite permissions/NOCs/Licenses etc from all the competent authorities before commencement of any activity at site.
- p. **Solar power generation** - Every major consumer of conventional power will have to generate and opt for certain percentage of power generation from the non-conventional sources. In this context, Project Proponent (PP) should necessarily make appropriate provision while constructing the roof-tops at the time of construction stage only to enable installation of solar panels including battery storage system.

- q. This environmental clearance is issued subject to land use verification. Local authority/ planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any, from time to time. Judgements/ Orders issued by Hon'ble High Court, NGT, Supreme Court regarding DCR provisions, environmental issues applicable in this matter should be verified by the competent authorities.
- r. PP should ensure and ascertain that '**civil plans**' which were submitted to the Committee/ Authority during the process of project appraisal be submitted to other line Departments/ agencies concerned while seeking NOC/ Consents/ Permissions, as applicable. If any discrepancy is found in the plans submitted or details provided may be reported to this Authority. This environmental clearance is issued with respect to the environmental considerations and it does not mean that Goa-SEIAA approved the proposed land.
- s. A complete set of all the documents submitted to Goa-SEIAA should be forwarded local authority, GSPCB and Planning authority.
- t. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the Goa-SEIAA.
- u. A copy of the environmental clearance letter shall be sent by PP to the concerned Village Panchayat and planning authority as applicable, from which suggestions / representation, if any, were received while processing the proposal. The EC letter shall also be put on the company's website by PP within one week time period from date of issue of environmental clearance.
- v. The environmental statement for each financial year ending 31st March in Form-V is to be submitted to the GSPCB as prescribed under the Environment (*Protection*) Rules 1986 (as amended) and subsequently shall also be put on the company's website along with the status of the compliance of the EC conditions and shall also be sent to the respective Regional Office of the MoEF & CC.
- w. The PP shall use construction debris for land filling wherever applicable and dispose the C& D waste in compliance to the Construction and Demolition Waste Management Rules.
- x. Borewell water is not to be used for construction phase, only used for drinking purpose and PP should maintain the meter reading on regular basis.
- y. PP should install Bio-gas plant to treat the Bio degradable waste.
- z. Building should be constructed as per National Building Code 2016 part-IV.
- aa. PP should do Corporate Social Responsibility and Corporate Environmental Responsibility as recommended / approved by Goa - SEAC/ Goa SEIAA.
- bb. No dust / debris from construction activities should be permitted to reach the area under natural reserve.

Further, progress will be reviewed after six months (*minimum 3 times in a year*) depending upon progress of the work. Further, the compliance to these conditions as and when submitted by PP will be verified / ascertained by the authority to propose additional conditions if any.

5. In case of submission of false document and non-compliance to any of the stipulated conditions, this Authority will revoke or suspend the EC without any intimation and initiate appropriate legal action under the Environment (*Protection*) Act, 1986 (*as amended till date*).

6. E-waste generated in the complex should be managed as per CPCB guidelines on E-

waste management.

7. The Goa-SEIAA reserves their right to add any stringent condition or to revoke the environmental clearance, if conditions stipulated above are not implemented to the satisfaction of the Authority or for that matter, for any other administrative reasons.

4. To discuss on proposed building plan for C.I.S.F. Battalion at survey no. 230/0, 250/0, 253/1-A, 253/2-A, 254/2-A & 270/1-A, Village – Pernem, Pernem Taluka, Goa for prior EC.

Decision: The Authority decided to defer this matter to the next meeting and decided to call the Project Proponent to give presentation and to discuss the activities to be undertaken under CER.

The meeting ended with thanks to chair.



(Smt. Reshma Mathew)
Member, Goa-SEIAA



(Shri. Suhas Godse)
Chairman, Goa-SEIAA



(Dasharath M. Redkar)
Member Secretary, Goa-SEIAA

Place: Patto-Panaji

Date: 13th June 2022

Annexure – 1

Shri. Suhas Godse

Chairman, Goa-SEIAA

Shri. Dasharath M. Redkar

Member Secretary, Goa-SEIAA

Smt. Reshma Mathew

Member, Goa-SEIAA

Annexure – 2

AGENDA OF THE 80th GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY (GOA-SEIAA) MEETING ON 13/06/2022 AT 03.30 P.M. IN THE CONFERENCE ROOM OF THE 4th FLOOR, DEMPO TOWER, PATTO, PANAJI-GOA.

1. To decide on application **(ToR)** from Deltin Town located at Plot bearing Survey No. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A and 280/1-B, Dhargalim village, Pernem Goa.
2. To decide on application **(ToR)** from Vagxepe Damdo Amabeya Temb Iron Ore Manganese Ore Mine located at Plot bearing Survey No. 87, 88, 89, 90, 91, 104, 105, 106, 107, 108, 109, 110, 111, 114 and 117, Molcornem, Goa.
3. To decide on the application received from Marvel Resorts Private Limited for expansion at P.T. Sheet No. 121/Chalta No. 2,3,4,38,39 and P.T. Sheet No. 130/Chalta No. 33, St. Inez, Tiswadi, North Goa for prior EC.
4. To discuss on proposed building plan for C.I.S.F. Battalion at survey no. 230/0, 250/0, 253/1-A, 253/2-A, 254/2-A & 270/1-A, Village – Pernem, Pernem Taluka, Goa for prior EC.
5. Any other matter with permission of the chair.

GOA STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Constituted by the Ministry of Environment, Forest and Climate Change,
Government of India

C/o Department of Environment and Climate Change
4th Floor, Dempo Towers, Patto Panaji Goa - 403001.
e-mail: goaseac@gmail.com

No.61/3/2022-23/GSEIAA/Project-Prop/279

Date: 10/02/2023

To,

Deltin Town,

Dhargalim, Pernem,

Goa.

Sub: Issuance of Amendment in Terms of Reference - (ToR) for Deltin Town located in plot bearing Survey No. 243/1A, 263/1, 264/1, 265/1, 265/2, 265/25, 265/26, 266/1, 267/1, 267/1-A, 268/1, 268/2, 268/3, 268/4, 269/1, 280/1, 280/1-A, 280/1-B, at Dhargalim Village, Pernem, Goa - reg.

Ref :Proposal No: SIA/GA/MIS/296573/2023 dated 17/06/2022

Project Category: Covered under schedule 8 (b)

Sir,

With reference to your Proposal No.SIA/GA/MIS/296573/2023 matter pertaining to issuance of Amendment in Terms of Reference (ToR's) which has been issued earlier (61/3/2022-23/GSEIAA/Project-Prop/228 dated 16/12/2022) for conducting the Environment Impact Assessment (EIA) study for proposed Township and Area Development Project (8 b) at Dhargalim, Pernem, Goa.

The Goa SEAC in its 169th meeting held on 18th January 2023, the said proposal was recommended to Goa State Environment Impact Assessment Authority (SEIAA) for grant of Amendment in ToR.

Further, Goa State Environment Impact Assessment Authority (SEIAA) in its 96th meeting held on 1st February 2023 considered Committee's recommendation and decided to grant Amendment in ToR.

In this regards it is decided to issue the Standard Terms of reference for conducting EIA study without public consultation.

Accordingly the amendment in ToR's is enclosed herewith (**refer Annexure - 1**) to enable the Project Proponent (PP) to initiate EIA study.

Yours faithfully



(Dr. Geeta S. Nagvenkar)
**Director (Envt. &CC) &
Member Secretary, Goa-SEIAA**

Encl: As Above.

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(BEFORE DR D.Y. CHANDRACHUD AND HEMANT GUPTA, JJ.)

a

Civil Appeal No. 12251 of 2018[†]

HANUMAN LAXMAN AROSKAR . . . Appellant;
Versus

UNION OF INDIA . . . Respondent.

b

With

Civil Appeal No. 1053 of 2019

FEDERATION OF RAINBOW WARRIORS . . . Appellant;
Versus

UNION OF INDIA AND OTHERS . . . Respondents.

c

Civil Appeals No. 12251 of 2018 with
No. 1053 of 2019, decided on March 29, 2019

d **A. Environment Law — Development vis-à-vis Ecology: National, Urban and Rural Development — Development Projects — Prerequisites for/ Environmental clearance/viability — Development of greenfield airport project in State of Goa — Environmental clearance (EC) — Flaws in environmental impact assessment (EIA) process — Suspension of environmental clearance (EC) and directions issued for proper EIA — Expert Appraisal Committee (EAC) constituted under EIA Notification, 2006 directed to revisit recommendations made by it for grant of EC having regard to specific concerns highlighted in this judgment**

e

— One month's time given for this — Till then EC granted by Ministry of Environment, Forests and Climate Change (MoEFCC) on 28-10-2015 shall remain suspended — No other court or tribunal shall entertain any challenge to report that is to be submitted before Court by EAC in compliance with the present order — MoEFCC and State Government given liberty to file report of EAC before Court to facilitate passing of appropriate orders thereon (Paras 162 to 166)

f

— Concerns highlighted in judgment:

— (1) Flaws in EIA process — (a) Non-disclosure of vital information, suppression of material facts by project proponent, (b) non-application of mind by EAC as an expert body and its failure to give cogent reasons, while recommending for grant of EC, and (c) failure of NGT as an adjudicatory body to carry out a merits review

g

h

[†] Arising from the Judgment and Order in *Hanuman Laxman Aroskar v. Union of India* (National Green Tribunal, Principal Bench at New Delhi, Appeal No. 6 of 2018, 21-8-2018 sub nom *Federation of Rainbow Warriors v. Union of India* [National Green Tribunal, Principal Bench at New Delhi, Appeal No. 5 of 2018 (earlier Appeal No. 61/2015/WZ), dt. 21-8-2018] 2018 SCC OnLine NGT 831

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— (2) Airport operations — Collection of baseline data — Guidance Manual for Airports specifically requires collection of baseline data on (i) land environment, (ii) water environment, (iii) air environment, (iv) noise environment, (v) biological environment, (vi) socioeconomic environment, and (vii) solid waste — As airport operations might have possible impact on biological environment, collection of baseline data on sensitive habitats and wild or endangered species in project area is contemplated — Baseline data of environmental parameters aid in preparation of an environment management plan (EMP) (Paras 63 to 69)

a

b

— (3) EAC shall have due regard to assurance furnished by concessionaire to Court that it is willing to adopt and implement necessary safeguards bearing in mind international best practices governing greenfield airports (Para 163.5)

— (4) Duty and onus of project proponent — It is duty of project proponent to make full, complete and candid disclosure of all environmental aspects — Burden of establishing environmental compliance rests on a project proponent who intends to bring about a change in the existing state of environment — However, in present case project proponent failed to disclose wetlands, water sources, water bodies, biospheres, mountains and forests within an aerial distance of 15 km as required by Form 1 of EIA Notification, 2006 — Duty to disclose about forest does not mean only reserve forest as contemplated within S. 20(2) of Forest Act, 1927 or forest as understood in any statutory enactment — Expression “forest” must receive its ordinary and natural connotation — The effort must not be to overlook and destroy forests but to notice and protect them — A failure to disclose information in Form 1 impairs the functioning of EAC in preparation of ToR and in consequence, leads to preparation of a deficient EIA report — There has been a patent failure on part of the project proponent to make mandatory disclosures stipulated in Form 1 under the 2006 Notification, that must have consequences in law (Paras 70 to 82)

c

d

e

— (5) EIA report defective — EIA report failed to notice existence of Ecologically Sensitive Zones (ESZs) within buffer distance of 10 km of project site — EIA report must encompass all aspects of environmental concern which render area ecologically sensitive i.e. wetlands, water sources, water bodies, coastal zones, biospheres, mountains and forests (Paras 91 and 92)

f

— (6) Data collection incomplete — Allegedly, no primary data with regard to environmental parameters like air quality, water quality, noise quality and flora and fauna were collected from State of Maharashtra and related only to State of Goa (Paras 93 to 101)

g

— (7) Incorrect information about trees — EIA report incorrectly stated that area required for proposed airport has only few trees but evidently permissions were granted for felling 54,676 trees — Issues pertaining to vegetational cover must be taken seriously in the EIA process (Paras 102 to 109)

h

- (8) Issues raised in public consultation not included in EIA — Intrinsic and instrumental value of public consultation — Stages of public consultation
- a* — Project proponent's duty to address all material environmental concerns raised during public consultation and make appropriate changes in draft EIA and EMP — Though only seven out of sixty-eight issues dealt with issue of unemployment, project proponent observed that major issue was unemployment — Duty of the project proponent to place fairly all the environmental concerns raised during the public hearing is the crucial link in the appraisal by EAC, which it failed in doing (Paras 110 to 117)
- b* — (9) EAC as an expert body failed to apply mind — Duty to apply mind to documents like EIA report, outcome of public consultation and public hearing proceedings — EAC is under a mandate to conduct process of appraisal in “a transparent manner” — And make a categorical recommendation about grant of EC on stipulated terms and conditions or rejection of EC — Recommendations made by EAC to regulatory authority must be based on “reasons” — Said recommendations constitute substantive material which ultimately affects decision-making process and also might form subject-matter of challenge before Tribunal — However, minutes indicate non-application of mind by EAC with reference to 15 ESZs in study area — In absence of critical analysis EAC failed in discharging its duties under 2006 Notification (Paras 118 to 129)
- c*
- d* — (10) NGT as an expert adjudicatory body on environment failed in its duty to exercise the jurisdiction entrusted to it under S. 16(h) r/w S. 20, NGT Act, 2010 by merely deferring decision to recommend and grant an EC — Though several important submissions were urged before it, entire analysis by NGT is contained in one paragraph and next para only deals with requirement of data collection — This does not fulfil requirement of merits review by the expert adjudicatory body like NGT (Paras 130 to 141)
- e*
- f* — (11) In environmental governance, means are as significant as ends, process of decision is as crucial as ultimate decision — However, there has been a failure of due process commencing from non-disclosure of vital information by project proponent to non-application of mind by EAC and failure of merits review by NGT — Thus in present case neither decision-making process nor ultimate decision of granting EC can be said to be valid — Bearing in mind that there is an urgency for setting up a new airport to tackle with increasing volume of passengers and at the same time protect environment, time bound directions were issued (Paras 142 to 167)
- g* — Infrastructure Laws — Carriage of Goods and Persons by Air, Land and Sea — Carriage by Air/Aircraft and Airports — Airport Development — EIA Guidance Manual for Airports, 2010 — Forests, Wildlife and Zoos — Demarcation/Determination/Identification of Forest Land — Forest Act, 1927 — S. 20 — Environmental Clearance/NOC/Environment Impact Assessment (EIA) — EIA Notification, 2006 — Form 1 — Regulatory Framework, Bodies and Judicial Intervention — Expert Appraisal Committee (EAC) — Duties of and manner of exercise of power while conducting EIA in grant of EC —
- h* National Green Tribunal Act, 2010 — Ss. 16(h) and 20 — Duties of and proper

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exercise of power — Doctrine of proportionality must be applied to matters concerning the environment as part of judicial review — Words and Phrases — “Forest”

a

B. Environment Law — National Green Tribunal Act, 2010 — S. 22 — Appeal to Supreme Court against orders of Tribunal — Maintainability — Locus standi, bona fides, plea of personal agenda — Approach of Court — Doctrine of proportionality must be applied to matters concerning the environment as part of judicial review

b

— In cases concerning environmental governance, courts should decide case on merits — Such cases involve present and future generations, sustainable development for today and tomorrow — If a court comes to finding that appeal before it lacks bona fides, it may issue directions which it thinks appropriate in that case — Vague aspersions on the intention of public-spirited individuals does not constitute an adequate response to those interested in the protection of the environment — Regulatory Framework, Bodies and Judicial Intervention — Generally — Environmental adjudication — Approach to — Constitution of India, Arts. 21 and 19(1)(g) & (g) (Para 164)

c

C. Environment Law — Environmental Clearance/NOC/Environment Impact Assessment (EIA) — EIA Notification, 2006 distinguished from 1994 Notification (Para 41)

d

D. Environment Law — Environmental Clearance/NOC/Environment Impact Assessment (EIA) — EIA Notification, 2006 — Procedure for grant of environmental clearance (EC) under — Four stages of obtaining EC, discussed, that is, screening, scoping, public consultation and appraisal by EAC — Importance and objectives of 2006 Notification

— In laying down a detailed procedure for the grant of an EC, 2006 Notification attempts to bridge perceived gap between environment and development — Development vis-à-vis Ecology: National, Urban and Rural Development — Development Projects — Prerequisites for/Environmental clearance/viability (Paras 45 to 62)

e

E. Environment Law — Environmental Clearance/NOC/Environment Impact Assessment (EIA) — EIA Notification, 2006 — Procedure for grant of environmental clearance (EC) under — Rejection of application for EC for missing and misleading information provided in Form 1 by project proponent

f

— Information provided by project proponent in Form 1 serves as the base upon which EAC or the State Expert Appraisal Committees (SEAC) to prepare comprehensive Terms of Reference (ToR), which applicant is required to address during course of preparation of EIA — ToR so prepared addresses all possible environmental concerns — Missing or misleading information in Form 1 significantly impedes the functioning of the authorities and process stipulated under the notification — For this reason, any application made or EC granted on the basis of a defective Form 1 is liable to be rejected immediately — Development vis-à-vis Ecology: National, Urban and Rural

g

h

Development — Development Projects — Prerequisites for/Environmental clearance/viability (Paras 45 to 62)

a F. Environment Law — Environmental Clearance/NOC/Environment Impact Assessment (EIA) — Objectives of EIA process

— To ensure that environmental and developmental concerns are appropriately balanced on the basis of the most accurate information available — This will determine what conditions be imposed for grant of EC —

b EC is required before any construction work, or preparation of land (except for securing the land) is started on the project or activity listed in the schedule to 2006 Notification — Development vis-à-vis Ecology: National, Urban and Rural Development — Development Projects — Prerequisites for/Environmental clearance/viability (Paras 34 to 62)

c The present appeal under Section 22 of the NGT Act, 2010 was filed to challenge the grant of environmental clearance (EC) for the development of a greenfield international airport at Mopa in Goa. The allegation was that project proponent (the State Government) did not disclose the material facts required by the 2006 Notification. And that the project proponent did not appraise the EAC about important issues raised during public consultation. And that the EAC as an expert body abdicated its duty to apply mind and give cogent reasons for grant of EC. And
d that NGT, an expert adjudicatory body also failed to carry out a merits review of grant of EC. NGT approved EC granted with certain additional conditions. Hence, the present appeals.

Allowing the appeals and setting aside EC granted and remanding matter back to EAC for proper application of mind with other directions, the Supreme Court

e Held :

C. Scheme of the 2006 Notification and the Guidance Manual for Airports

C.1. EIA Process

The objective of the EIA process is to ensure that environmental and developmental concerns are appropriately balanced on the basis of the most accurate information available. (Para 34)

f The salient objective which underlies the 2006 Notification is the protection, preservation and continued sustenance of the environment when the execution of new projects or the expansion or modernisation of existing projects is envisaged. It imposes certain restrictions and prohibitions based on the potential environmental impact of projects unless prior EC has been granted by the authority concerned. EC is required before any construction work, or preparation of land (except for securing the land) is started on the project or activity listed in the schedule to the notification. (Para 42)

g The 2006 Notification embodies the notion that the development agenda of the nation must be carried out in compliance with norms stipulated for the protection of the environment and its complexities. In laying down a detailed procedure for the grant of an EC, the 2006 Notification attempts to bridge the perceived gap between the environment and development. (Para 56)
h

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It is for this reason that EAC and SEAC comprise experts in the field of environmental law. Given that these bodies comprise experts in the field of environmental law, the recommendation of EAC or SEAC to grant EC to an applicant or reject the application is *normally* accepted by the regulatory authority. (Paras 57 and 58)

a

Given the environmental consequences of a proposed project, no difference of opinion is provided for in the grant of an EC at the State level. It is further mandated that the project management submit half-yearly compliance reports to the regulatory authority in respect of EC and conditions. (Para 59)

b

Under the 2006 Notification, the process of obtaining an EC commences from the production of the information stipulated in Form 1/Form 1-A. Crucial information regarding the particulars of the proposed project is sought to enable EAC or SEAC to prepare comprehensive Terms of Reference (ToR) which the applicant is required to address during the course of the preparation of the EIA. The ToR so prepared addresses all possible environmental concerns. It is on the basis of ToR, that further studies and the EIA are carried out on the impact of the proposed project on the environment. (Paras 60 and 61)

c

The information provided in Form 1 serves as a base upon which the process stipulated under the 2006 Notification rests. An applicant is required to provide all material information stipulated in the form to enable the authorities to formulate comprehensive ToR and enable persons concerned to provide comments and representations at the public consultation stage. The depth of information sought in Form 1 is to enable the authorities to evaluate all possible impacts of the proposed project and provide the applicant an opportunity to address these concerns in the subsequent study. Missing or misleading information in Form 1 significantly impedes the functioning of the authorities and the process stipulated under the notification. For this reason, any application made or EC granted on the basis of a defective Form 1 is liable to be rejected immediately. (Para 62)

d

e

C.2. Guidance Manual for Airports

In February 2010, MoEF brought out its Guidance Manual for Airports. The need for a sector-specific manual arose because the 2006 Notification “re-engineered the entire EC process” under its earlier avatar of 1994 and new sectors were incorporated into the ambit of EC process. The 2006 Notification noted that as many as 39 developmental sectors require prior ECs. Sector-specific manuals, it was hoped, would bring about standardisation in the quality of appraisal and obviate potential inconsistencies between the work performed by SEIAAs and SEACs. (Para 63)

f

Baseline data of environmental parameters which may be affected by airport activities is collected through primary monitoring in the study area and through secondary sources. The baseline data facilitates the evaluation of the predicted impact on environmental attributes in the study area by using scientific analysis and EIA methodologies. The object is to also aid in the preparation of an EMP that would outline measures for improving environmental quality as well as retain the scope for future expansions in a sustainable manner. The Guidance Manual specifically requires collection of baseline data on the following: (i) land environment; (ii) water environment; (iii) air environment; (iv) noise environment;

g

h

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(v) biological environment; (iv) socioeconomic environment; and (vii) solid waste. (Para 64)

a The Guidance Manual brings into focus the biological environment. It acknowledges that airport operations may alter ecosystems, threaten endangered species and disturb the movement and breeding patterns of wildlife. In this context, the collection of baseline data on sensitive habitats and wild or endangered species in the project area is contemplated. (Para 68)

b It is in the backdrop of the 2006 Notification and the Guidance Manual that it becomes necessary to assess the process that was adopted in the present case and its outcome. (Para 69)

D. Forests

c The court cannot gloss over the patent and abject failure of the State of Goa as the project proponent in failing to disclose wetlands, water sources, water bodies, biospheres, mountains and forests within an aerial distance of 15 km as required by Form 1. A duty is cast upon the project proponent to make a full, complete and candid disclosure of all aspects bearing upon the environment in the area of study. The project proponent cannot profess an ignorance about the environment in the study area. The project proponent is bound by the highest duty of transparency and rectitude in making the disclosures in Form 1. (Paras 70 to 73)

d It cannot be accepted that the disclosure required was of reserved forests comprehended within a notification under Section 20(2) of the Forest Act, 1927. The expression “forests”, means a forest as commonly understood, without reference to a notification under the Forest Act, 1927 or any other statutory enactment. Such an interpretation will subserve the purpose of an EIA. The purpose is to ensure that all relevant facets of the environment are noticed, that baselines are documented, and that the potential impact of a project or activity on the environment is assessed. Forests are forests without reference to recognition in a statutory form devised for a specific purpose. (Para 74)

In the context of the 2006 Notification and the underlying purpose of facilitating an EIA report, the expression “forests” must receive its ordinary and natural connotation. The effort must not be to overlook and destroy forests but to notice and protect them. (Para 77)

f *T.N. Godavarman Thirumulpad v. Union of India*, (1997) 2 SCC 267; *Noida Memorial Complex Near Okhla Bird Sanctuary, In re*, (2011) 1 SCC 744, *distinguished*
Federation of Rainbow Warriors v. Union of India, 2017 SCC OnLine NGT 1964; *Federation of Rainbow Warriors v. Union of India*, 2017 SCC OnLine NGT 1962; *Federation of Rainbow Warriors v. Conservator of Forests*, 2018 SCC OnLine Bom 329 : (2018) 3 Mah LJ 424; *Hanuman Laxman Aroskar v. Union of India*, 2019 SCC OnLine SC 500, *referred to*

g Alternative submission that disclosure about forests was made not tenable

h The alternate submission that the EIA report does, as a matter of fact, consider the prevalence of forested areas both in Goa and in Maharashtra within the study area is not tenable. Though the EIA report adverts to the presence of forests within the study area in Goa and Maharashtra, it has to be considered whether this by itself warrants the grant of an EC in spite of the fact that there has been a patent failure on part of the project proponent to make a transparent and candid disclosure of material facts in Form 1. A failure to disclose information in Form 1 impairs

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the functioning of EAC in the preparation of ToR and in consequence, leads to preparation of a deficient EIA report. (Paras 78 to 81)

The failure on the part of a project proponent to disclose material information in Form 1 as stipulated under the 2006 Notification has a cascading effect on the salient objective which underlies the 2006 Notification. The burden of establishing environmental compliance rests on a project proponent who intends to bring about a change in the existing state of the environment. Whereas, in the present case, there has thus been a patent failure on the part of the project proponent to make mandatory disclosures stipulated in Form 1 under the 2006 Notification, that must have consequences in law. There can be no gambles with the environment: a “heads I win, tails you lose” approach is simply unacceptable; unacceptable if we are to preserve environmental governance under the rule of law. (Para 82)

E. Ecologically Sensitive Zones (ESZs)

The glaring deficiency which emerges from the EIA report is its failure to notice the existence of ESZs within a buffer distance of 10 km of the project site. The EIA report fails to meet a classical requirement of administrative law: to take into account a relevant consideration, namely, that within the study area which has to be considered, there is the presence of ESZs. (Para 91)

The EIA report must factor in those specific features which make an area ecologically sensitive. These would encompass all aspects of environmental concern which render the area ecologically sensitive. This would include wetlands, water sources, water bodies, coastal zones, biospheres, mountains and forests. The deficiency of the EIA report emanates from its failure to notice that the purpose of the study was not only to determine whether the project site is ecologically sensitive. Confining itself to this aspect, the EIA report failed to consider a crucial and relevant consideration. (Para 92)

F. Sampling points

The submission of the appellants is that the Guidance Manual requires the collection of primary data through measures and field studies in the study area within 10 km radius from the ARP. Secondary data has to be collected within a 15 km aerial distance for the parameters mentioned in Column 9(III) of Form 1 of the 2006 Notification. In the present case, it was urged that not a single sampling station with reference to any of the parameters is situated in Maharashtra. (Para 93)

The grievance is that no data has been collected from the State of Maharashtra and all secondary data collected by the project proponent related only to the State of Goa. There is substance in the submission which has been urged on behalf of the appellant. A reading of the counter-affidavit filed by the State of Goa would seem to support the appellant’s submission. (Paras 93 to 101)

F.5. Felling of trees

The Court expresses its serious displeasure with the manner in which the EIA report made an attempt to gloss over the existence of trees. The EIA report prevaricated by recording that the area required for the proposed airport has only a few trees, mostly bushes. The State of Goa would have the court gloss over the felling of trees by submitting that 54,676 trees over a project area of 2133 ac averages out to 25 trees per acre or one tree over an area of 160 sq m. This is a fallacious approach to the issue. Mathematical averages cannot displace factual

a data about the actual number of trees which were affected by the project. The EIA report ought to have scrutinised the number of trees, their nature and longevity. Issues such as the extent to which the trees or some of them were capable of being transplanted had to be considered in the EIA report. The location of the trees is also significant. In a given case, if the trees appear in clusters or in a dense formation in segments of the project site, it would be necessary to determine whether felling all of them was necessary for the project to be implemented. (Paras 102 to 108)

b The purpose of prescribing an EIA report is precisely to undertake a baseline study on all aspects of the environment and to anticipate the impact of a projected activity on the environment. Ignoring *any* component of the environment amounts to a serious dereliction of duty which detracts from the rule of law in matters of environmental governance. (Para 108)

c Issues pertaining to vegetational cover must be taken seriously in the EIA process. The formula of planting a set number of trees for every existing tree felled must be alive to the fact that the survival of new plantations is replete with uncertainty. The survival of transplanted trees is equally a matter of uncertainty. Though the development of infrastructure may necessitate the felling of trees, the process stipulated under the 2006 Notification must be transparent, candid and robust. A regulatory regime for environmental governance is based on the hypothesis that all stakeholders will act with rectitude. Hiding significant components of the environment from scrutiny is not an acceptable modality to secure project approvals. There was a serious lacuna in regard to disclosures and appraisal on this aspect of the controversy. (Para 109)

G. Public consultation

e The importance of public consultation is underscored by the 2006 Notification. Public consultation, as it states, is “the process by which the concerns of local affected persons and others who have a plausible stake in the environmental impacts of the project or activity are ascertained with a view to take into account all the material concerns in the project or activity design as appropriate”. This postulates two elements. They have both, an intrinsic and an instrumental character. The intrinsic character of public consultation is that there is a value in seeking the views of those in the local area as well as beyond, who have a plausible stake in the project or activity. (Paras 110 to 112)

f Apart from the intrinsic value of public consultation, it serves an instrumental function as well. The purpose of ascertaining the views of stakeholders, is to account for all the material concerns in the design of the proposed project or activity. For this reason, the process of public consultation involves several important stages. The Pollution Control Board is under a mandate to forward the proceedings to the regulatory authority. The project proponent must address all material environmental concerns and make appropriate changes in the draft EIA and EMP. The project proponent may even submit a supplementary report to the draft EIA. (Para 113)

g Crucial objections and environmental concerns which were raised during the consultative process were reduced to a single issue by the project proponent before EAC: the need for employment opportunities. The project proponent failed h in its duty to inform EAC. The record does not indicate a critical appraisal or analysis by EAC. EAC was duty-bound to apply its mind to the environmental

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concerns raised by stakeholders. The duty of the project proponent to place fairly all the environmental concerns raised during the public hearing is the crucial link in the appraisal by EAC. The minutes of the meeting indicate that there was no fair and complete disclosure of the objections which were raised during the public hearing before EAC. There is evidently a failure in the process of applying and implementing the norms laid down in the 2006 Notification in this regard. (Paras 113 to 117)

Utkarsh Mandal v. Union of India, 2009 SCC OnLine Del 3836, approved

H. Appraisal by EAC

Appraisal by EAC is structured and defined by the 2006 Notification. The process of appraisal is defined to mean “a detailed scrutiny” by EAC of the application and other documents like EIA report and the outcome of the public consultation, including the public hearing proceedings, submitted by the applicant to the regulatory authority for the grant of an EC. EAC is under a mandate to conduct the process of appraisal in “a transparent manner”. On the conclusion of these proceedings, EAC has to make “categorical recommendations” to the regulatory authority either for:

- (i) the grant of a prior environmental clearance on stipulated terms and conditions; or
- (ii) the rejection of the application.

The recommendations made by EAC to the regulatory authority must be based on “reasons”. (Para 118)

EAC has failed to consider relevant circumstances bearing on the environmental impact of the project and has instead considered circumstances extraneous to its function. That the project proponent, according to EAC, has not concealed facts and circumstances is not reason enough to warrant a grant of an EC. Moreover, even this hypothesis is incorrect. There is no analysis of the EIA report. EAC has failed to answer to the call to its expertise. (Paras 119 to 125)

EAC is an expert body. It must speak in the manner of an expert. Its remit is to apply itself to every relevant aspect of the project bearing upon the environment. It is not bound by the analysis which is conducted in the EIA report. It is duty-bound to analyse the EIA report. Where it finds it deficient it can adopt such modalities which, in its expert decision-making capacity, are required. The reasons which are furnished by EAC constitute a live link between its processes and the outcome of its adjudicatory function. In the absence of cogent reasons, the process by its very nature, together with the outcome stands vitiated. (Para 127)

EAC, as an expert body, has to scrutinise all relevant aspects of the project or activity proposed, including its impact on the environment. In taking that decision, the EIA report is an input for its analysis. The scrutiny and appraisal has to be undertaken by EAC as an expert body and its reasons must reflect that this has been done. As the minutes indicate, the non-application of mind by EAC is evident with reference to the presence of 15 ESZs in the study area. EAC notes that the project is outside the ESZ delineated by the Kasturirangan Committee. In the absence of a critical analysis, EAC failed in discharging its duties under the 2006 Notification. The recommendations of EAC furnish a guide for MoEFCC. Indeed, the 2006 Notification stipulates that the recommendations of EAC would normally

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be accepted. Consequently, a failure of due process before EAC, as in the present case, must lead to the invalidation of EC. (Para 129)

a I. The appellate jurisdiction of NGT: the requirement of a merits review

The failure to consider materials on a vital issue and indeed the non-consideration of vital issues raises a substantial question of law leading to the invoking of the jurisdiction of the Supreme Court under Section 22 of the NGT Act, 2010. The failure of process in the present case has been compounded by the absence of a merits review by NGT. (Paras 132 to 136)

b *Save Mon Region Federation v. Union of India*, (2013) 1 All India NGT Reporter 1; *Sreeranganathan K.P. v. Union of India*, 2014 SCC OnLine NGT 15, approved

The doctrine of proportionality must be applied to matters concerning the environment as part of judicial review. (Para 140)

Lafarge Umiam Mining (P) Ltd. v. Union of India, (2011) 7 SCC 338, relied on

c EAC as an expert body abdicated its obligations to make an expert determination based on reasons. NGT as an adjudicatory body failed to exercise the jurisdiction entrusted to it under Section 16(h) read with Section 20 of the NGT Act, 2010 by merely deferring to the decision to recommend and grant an EC. The parameters in regard to the existence of substantial questions of law have hence been established in the classical or conventional sense of that expression. (Paras 130 to 141)

d *Mantri Techzone (P) Ltd. v. Forward Foundation*, (2019) 18 SCC 494 : 2019 SCC OnLine SC 322; *Chunilal V. Mehta and Sons Ltd. v. Century Spg. and Mfg. Co. Ltd.*, 1962 Supp (3) SCR 549 : AIR 1962 SC 1314; *Vellore Citizens' Welfare Forum v. Union of India*, (1996) 5 SCC 647; *M.C. Mehta v. Kamal Nath*, (1997) 1 SCC 388; *M.C. Mehta v. Union of India*, (1997) 2 SCC 353; *A.P. Pollution Control Board v. M.V. Nayudu*, (1999) 2 SCC 718; *Narmada Bachao Andolan v. Union of India*, (2000) 10 SCC 664; *Indian Council for Enviro-Legal Action v. Union of India*, (2011) 8 SCC 161 : (2011) 4 SCC (Civ) 87, relied on

e J. Environmental rule of law

Since the Stockholm Conference, there has been a dramatic expansion in environmental laws and institutions across the globe. In many instances, these laws and institutions have helped to slow down or reverse environmental degradation. However, this progress is also accompanied, by a growing understanding that there is a considerable implementation gap between the requirements of environmental laws and their implementation and enforcement—both in developed and developing countries alike. The environmental rule of law seeks to address this gap. (Paras 142 to 155)

f United Nations Environment Programme, First Environmental Rule of Law Report. Available at <https://wedocs.unep.org/bitstream/handle/20.500.11822/27279/Environmental_rule_of_law.pdf?sequence=1&isAllowed=y>; Brundtland definition of Sustainable Development, referred to

g In the area of environmental governance, the means are as significant as the ends. The processes of decision are as crucial as the ultimate decision. The basic postulate of the 2006 Notification is that the path which is prescribed for disclosures, studies, gathering data, consultation and appraisal is designed in a manner that would secure decision making which is transparent, responsive and inclusive. (Paras 156 and 157)

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In the present case, there has been a failure of due process commencing from the non-disclosure of vital information by the project proponent in Form 1. (Para 159)

EAC, as an expert body abdicated its role and function by taking into account circumstances which were extraneous to the exercise of its power and failed to notice facets of the environment that were crucial to its decision making. (Para 160)

In this view of the matter, neither the process of decision making nor the decision itself can pass legal muster. Bearing in mind the need to bring about a wholesome balance between the development of infrastructure of an airport and the preservation of the environment, time-bound directions should be issued. Bearing in view the necessity to maintain a balance between the need for an airport and environmental concerns, it would be appropriate if EAC is directed to revisit the conditions subject to which it granted its EC on the basis of the specific concerns which have been highlighted in this judgment. (Paras 158 and 161 to 167)

Federation of Rainbow Warriors v. Union of India, 2018 SCC OnLine NGT 831, reversed

SS-D/62216/S

Advocates who appeared in this case :

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b

The Judgment of the Court was delivered by

DR D.Y. CHANDRACHUD, J.—

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A. Introduction

1. An appeal was filed before the Principal Bench of the National Green Tribunal (NGT) at New Delhi challenging the grant of an environmental clearance (EC) for the development of a greenfield international airport at Mopa in Goa. NGT, by its judgment dated 21-8-2018¹ came to the conclusion that the present case “is not a case where the project compromises with the environment”. While affirming EC, NGT came to the conclusion that “further safeguards for environmental protection need to be incorporated”. NGT, accordingly, proceeded to formulate additional conditions, while affirming the grant of EC.
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¹ *Federation of Rainbow Warriors v. Union of India*, 2018 SCC OnLine NGT 831

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2. Village Mopa is situated in North Goa, in close proximity to the inter-State boundary which the State shares with Maharashtra. The site of the proposed airport lies at a distance of 35 km from Panaji, the capital of Goa. The Village of Mopa is situated in Pernem Taluka. The site for the development of the airport is situated on a tabletop plateau which rises to a height of 150 to 180 m above mean sea level and is surrounded by steep slopes. The soil is predominantly of a laterite character. The airport which presently serves the region is situated at Dabolim, Goa. a

3. Since the airport at Dabolim is saturated in terms of its capacity for annual air traffic, the State Government initiated a process in 1997 to commission studies and project reports for a proposed international airport, which include the following: b

3.1. A project report prepared by Engineers and Management Associates, Spain in 1997.

3.2. A preliminary technical feasibility study prepared by the Airports Authority of India in May 1998. c

3.3. A final feasibility report for the proposed airport at Goa prepared by the International Civil Aviation Organisation, Montreal, Canada in August 2005.

3.4. A Goa dual airport study prepared by the International Civil Aviation Organisation in August 2007. d

3.5. A report of a Six-member Committee chaired by the Chief Minister of Goa in 2008 to “look into all aspects relating to construction of an international airport at Mopa, Goa”. e

3.6. A document styled as the “Airport Master Plan” dated 10-2-2012, submitted to the Public Private Partnership (PPP) cell of the Government of Goa by Ammann & Whitney, USA envisaging: “consultancy services for preparation of master plan, preliminary project report, tender document and project management services for the proposed greenfield airport and commercial/industrial and allied development near Mopa in the State of Goa”. f

4. On 1-5-2000, the Government of India communicated its approval for the setting up of an airport at Mopa and for the closure of the existing airport for civilian operations on the commissioning of the new airport. Subsequently, on 1-7-2010, the earlier decision was modified to allow for the continuation of civilian aircraft operations at Dabolim even after the commissioning of the new airport. The process of land acquisition commenced in 2008 under the Land Acquisition Act, 1894. Originally, the land area anticipated for the development of the project was pegged at 4500 ac. During the pendency of project appraisals, the area required for the proposed airport stood reduced to 2271 ac. g

5. On 14-9-2006, the Government of India in the Ministry of Environment and Forests (MoEF, later renamed as MoEFCC in 2014) issued a notification [No. S.O. 1533 (the 2006 Notification)] mandating a prior EC for Category ‘A’ projects (specified in the Schedule) by the Union Government and for Category ‘B’ projects at the State level by the State Level Environment Impact Assessment Authority (SEIAA). Following the 2006 Notification, MoEF placed an EIA Guidance Manual for Airports (the Guidance Manual) in the public h

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domain in February 2010. The stages of scoping, public consultation and appraisal, leading up to the grant of EC for the proposed airport are governed by the express terms of the 2006 Notification.

a 6. In March 2011, the State of Goa, as the project proponent submitted Form 1 as stipulated in the 2006 Notification to MoEF. On 8-3-2011, the State of Goa applied for terms of reference (ToR) to MoEF. ToR were finalised on 11-5-2011 and 12-5-2011 by the Expert Appraisal Committee (EAC) constituted under the 2006 Notification. On 1-6-2011, MoEF issued ToR for the preparation of the Environmental Impact Assessment (EIA) report. ToR was valid for a period of two years until 31-5-2013. On 22-11-2012, the Government of Goa revised the project boundary by decreasing the project area from 4500 ac to 2271 ac. At its meetings on 28-1-2013 and 29-1-2013, EAC recommended an amendment to ToR as requested by the State Government and granted an extension to the validity of ToR until 31-5-2014. On 19-6-2013, MoEF communicated its approval for the amendment of ToR and for the extension of its validity.

d 7. On 3-10-2014, the State Government floated a tender for the development of a greenfield international airport project on a PPP basis. On 20-10-2014, the Directorate of Civil Aviation, Government of Goa submitted a draft EIA report to the Goa State Pollution Control Board, requesting it to initiate steps to conduct a public hearing. A public hearing was conducted at the project site on 1-2-2015. EAC, at its meetings held on 9-3-2015 to 11-3-2015, recommended an extension of the validity of ToR for another year ending on 31-5-2015.

e 8. On 20-5-2015, the State of Goa submitted a final EIA report to MoEFCC, seeking the grant of an EC for the project. On 29-5-2015, MoEFCC communicated its approval for extending the validity of ToR until 31-5-2015. Between 24-6-2015 and 26-6-2015, EAC, at its 149th meeting, deliberated on the EIA report and sought additional information from the project proponent, inter alia, on:

- “• 10 years’ data regarding rainfall in the area;
- f • Drawing of traffic circulation plan for smooth circulation of traffic in the area;
- Minimum 20% energy conservation measures should be adopted in incorporating provisions for use of LED, star rated ACs, and a revised energy conservation plan to be submitted;
- g • Measures taken to comply with the CPCB guidelines formulated for noise pollution control in airport area to be submitted.”

In the meantime, a representation was submitted by the Federation of Rainbow Warriors, one of the appellants before this Court to EAC. EAC, at its 151st meeting held on 7-9-2015 to 9-9-2015, deliberated upon the representation and sought a clarification from the project proponent on the issues raised. On 28-9-2015, the project proponent submitted its reply to the representation. h EAC, at its 152nd meeting on 20-10-2015, sought a further clarification from

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the project proponent on the reply submitted by the Federation of Rainbow Warriors. At that meeting, EAC recommended the grant of an EC for the project.

9. On 28-10-2015, MoEFCC, as the regulatory authority under the 2006 Notification for Category 'A' projects, communicated its approval for the grant of an EC. Following the grant of EC, the tender process which had been initiated on 3-10-2014 was concluded on 26-8-2016. Consequent to the opening of the final bids, a technical scrutiny, evaluation coupled with pre-bid meetings, deliberations on the draft concession agreement and other required steps, GMR Goa International Airport Ltd. (GGIAL) was awarded the contract on a revenue sharing of 36.99% to the State of Goa. On 8-11-2016, the concession agreement was executed between the Government of Goa and GGIAL for the development and operation of the airport with the concession period of 40 years. Upon financial closure, the three-year period for the construction of the airport commenced on 4-9-2017. The target date for the commissioning of the first phase of the project is 3-9-2020.

10. The grant of EC was challenged before the Western Zonal Bench of NGT (Appeal No. 61 of 2015) by the Federation of Rainbow Warriors. Hanuman Laxman Aroskar also filed an appeal (Appeal No. 1 of 2016) before the Western Zonal Bench of NGT. These appeals were subsequently renumbered (Appeals Nos. 5 and 6 of 2018) before the Principal Bench of NGT at New Delhi. On 7-11-2017², NGT issued an ad interim order restraining the cutting or felling of trees in the area designated as the site of the proposed airport. On 22-11-2017³, the order of restraint was modified on the statement of the Advocate General of Goa that the State shall not cut or fell any trees, nor allow it to take place without valid permission from the lawful authority for a fortnight thereafter in order to enable the appellants to pursue their remedies. On 6-2-2018, the Deputy Conservator of Forests granted permission for felling 21,703 trees at the airport site. The appellate authority under the Goa, Daman and Diu Preservation of Trees Act, 1984 (6 of 1984) dismissed the appeal on 7-3-2018.

11. On 8-3-2018⁴, the High Court of Judicature at Bombay at its seat at Goa set aside the order of the Deputy Conservator of Forests and remanded the matter to be heard by the Principal Chief Conservator of Forests. On 2-4-2018, the Principal Chief Conservator of Forests stipulated several conditions for the cutting and the felling of trees at the site of the airport including: (i) enumeration of trees; and (ii) the plantation of ten times the number of trees felled. Upon being moved in a public interest litigation (PIL), the High Court by its order dated 25-4-2018 allowed the exercise of enumeration to be carried out. As a result, 54,676 trees were enumerated, including the 1548 trees which had been

² *Federation of Rainbow Warriors v. Union of India*, 2017 SCC OnLine NGT 1964

³ *Federation of Rainbow Warriors v. Union of India*, 2017 SCC OnLine NGT 1962

⁴ *Federation of Rainbow Warriors v. Conservator of Forests*, 2018 SCC OnLine Bom 329 : (2018) 3 Mah LJ 424

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a felled earlier in terms of the order dated 6-2-2018 of the Deputy Conservator of Forests. On 13-1-2018, the High Court issued final directions in the PIL directing the State of Goa to approach NGT seeking permission for felling and cutting trees. The State was directed to carry out the cutting and felling of trees only after prior permission was granted by NGT.

b 12. A miscellaneous application (MA No. 975 of 2018) was filed by the State of Goa before NGT on 2-7-2018 seeking permission for the felling of trees. By its judgment dated 21-8-2018¹, NGT disposed of both the appeals and the miscellaneous application filed by the State of Goa, upholding EC and imposing additional conditions to safeguard the environment. This Court has been informed that the felling of trees was initiated on 3-9-2018 and completed on 14-1-2019. Assailing the judgment of NGT, two appeals have been filed before this Court: one by Hanuman Laxman Aroskar (Civil Appeal No. 12251 of 2018) and the other by the Federation of Rainbow Warriors (Civil Appeal No. 1053 of 2019).

c 13. On 18-1-2019⁵, notice was issued in the appeals and an order of status quo was passed by this Court. The appeals were admitted for hearing and final disposal.

d B. Submissions

e 14. We have heard Ms Anitha Shenoy, learned counsel appearing on behalf of the appellants. Mr K.K. Venugopal, learned Attorney General (AG) for India appeared on behalf of the State of Goa. Mr Atmaram S. Nadkarni, learned Additional Solicitor General (ASG) of India appeared on behalf of MoEFCC. Mr Parag P. Tripathi, learned Senior Counsel and Ms Aastha Mehta, learned counsel appeared on behalf of the concessionaire.

f 15. Ms Anitha Shenoy, learned counsel appearing on behalf of the appellants urged that the EIA report which is carried out under the terms of the 2006 Notification is a tool to evaluate the environmental consequences of a proposed activity. The proposed international airport, being a Category 'A' project, is governed by the second, third and fourth stages of scoping, public consultation and appraisal respectively envisaged under the 2006 Notification. In addition to the 2006 Notification, the Guidance Manual furnishes a significant signpost in the procedure envisaged prior to the grant of an EC. The project proponent is required to submit Form 1 complete with relevant details of the proposed project and the status of the environment. ToR which is finalised by EAC is founded on the disclosures which are made by the project proponent.

g 16. In this backdrop, the principal submissions urged by the appellants before the Court are as follows:

h 16.1. There were material concealments by the project proponent in failing to disclose that as many as 54,676 trees were required to be felled. Form 1, which was submitted by the project proponent, was silent in regard to the

¹ Federation of Rainbow Warriors v. Union of India, 2018 SCC OnLine NGT 831

⁵ Hanuman Laxman Aroskar v. Union of India, 2019 SCC OnLine SC 500

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number of trees required to be felled. The final EIA report, while dealing with the biological environment in Clause 2.1.5 contains the following statement:

“2.1.5. Biological environment a

Construction phase

Impacts (Significance-Medium)

The area acquired for proposed airport has only few trees, mainly bushes. These will be cleared during site preparation.”

Contrary to the above assertion is the statement contained in the counter-affidavit filed by the State of Goa: b

“...I say that the permissions which have been obtained for cutting of 54,676 trees have been granted by the authorities concerned in terms of the relevant statutory provisions and after laying down various conditions. I say that the context in which it was mentioned as sparse trees has to be seen from the huge area of the land. The land being 2133 ac, it would proportionally work out to about 25 trees in an area of 1 ac i.e. 4000 sq m, which is one tree in an area of about 160 sq m.” c

The submission urged by the appellants is that the purpose of the EIA report is to form an assessment of the state of environment as it exists in reality. The project proponent is duty-bound to make a proper disclosure and the highest level of transparency is required. Accompanying Form 1 is a declaration of the project proponent that EC will be liable to be rejected in the event of a suppression or misstatement of material facts. The State of Goa filed a miscellaneous application before NGT seeking permission to fell around 55,000 trees. This is a clear indicator that the original statement by the project proponent in Form 1 as well as in Clause 2.1.5 of the EIA report that only a few trees were required to be felled is factually incorrect. d

16.2. There was a concealment of Ecologically Sensitive Zones (ESZs) in the State of Maharashtra. In terms of the Guidance Manual, primary data through measures and full surveys; and secondary data from secondary sources have to be collected. Primary data includes the study area within 10 km radius from the Aerodrome Reference Point (ARP) and covers one season other than the monsoon. Secondary data includes data collected within an aerial distance of 15 km for the parameters which are specifically mentioned in Column 9(III) of Form 1 of the 2006 Notification and covers one full year. In the present case, while furnishing details of ESZs falling within an aerial distance of 15 km, the EIA report stipulates that there were none in the State of Maharashtra. The State of Goa has also averred in its counter that there are no ESZs within a radius of 15 km from ARP and that there are no reserve forests in that radius. After hearings had begun before NGT, a letter was addressed by the Principal Chief Conservator of Forests on 12-2-2018 to the Director of Civil Aviation stating that a list of reserved forests had been notified under Section 20 of the Forest Act, 1927 in Sawantwadi Forest Division of Sindhudurg District in Maharashtra which was obtained from the working plan of Sawantwadi Forest Division e
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- (2014-15 to 2023-24). The letter stated that there was no reserved forest notified under Section 20 of the Forest Act, 1927 in the Sawantwadi Forest Division, within a radius of 15 km from the ARP. On this aspect, it was urged on behalf of the appellants that restrictions come into force as soon as a notification under Section 4 of the Forest Act, 1927 is issued. Under the Forest Conservation Act, 1980, any use of forest land for non-forest purposes requires prior permission of the Union Government, as elaborated in the judgment of this Court in *T.N. Godavarman Thirumulpad v. Union of India*⁶ (*Godavarman*). The purpose of elucidating forest areas which fall within an aerial distance of 15 km from the project site is to enable an assessment to be made of the impact of the project on forested areas. Failure to mention forests in the State of Maharashtra was a significant omission in the EIA report.

- 16.3.** Form 1 requires a disclosure of the details of ESZs within an aerial distance of 15 km of the project boundary. The EIA report rests content in stating that Pernem Taluka is not included in an ESZ by the High Level Working Group (HLWG) constituted under the Chairmanship of Dr K. Kasturirangan, Member (Science), Planning Commission (Kasturirangan Report). The project proponent, in response to the disclosures required for areas which are important or sensitive for ecological reasons — wetlands, water sources or other water bodies, coastal zone, biospheres, mountains and forests, left the required details blank. In this context, it was urged by the appellants that the purpose of the EIA report was not only to make an assessment of the project site but also of an area surrounding the project site within an aerial distance of 15 km. HLWG recognised that there were ESZs. In the present case, several villages are situated at a bare distance of 1.5 km from the project site in Maharashtra. Yet, there was no disclosure of this fact and the EIA report merely recorded that Pernem Taluka is not included in an ESZ.

- 16.4.** The State of Maharashtra comprises nearly 40% of the study area. Yet, there was no sampling of soil, air and water in Maharashtra. Sampling was carried out in 2011 and 2014-15 in Goa but no sampling site is situated in Maharashtra. In the absence of baseline data generated with regard to environmental parameters in the State of Maharashtra surrounding the project site, the EIA report suffers from a gross deficiency.

- 16.5.** The EIA report is grossly deficient in failing to notice wildlife in the surrounding forests. On the contrary, the appellants have relied on a rapid survey conducted to assess the presence of various mammals in the study area. Moreover, no avi-faunal study was done.

- 17.** Apart from the above submissions, Ms Shenoy has urged that the stages of public consultation and appraisal under the 2006 Notification are crucial to the assessment process. As far as the public consultation is concerned, the draft EIA is given before the hearing. During the course of the public consultation, as many as 70 persons spoke, 1150 representations were received and 1586 persons are stated to have participated. The range of concerns expressed during

⁶ (1997) 2 SCC 267

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the course of the public consultation covered a variety of environmental issues. Amongst them was the presence of perennial springs, the porous nature of the laterite plateau where permeation is a source of drainage for water collection and the existence of cashew plantations on which the livelihood of the local residents depends. Under the 2006 Notification, the State Pollution Control Board (SPCB) was required to collate the issues raised and the response of the project proponent, before submitting required documents to EAC. Before EAC, the project proponent in its presentation, indicated that the objections were only about employment opportunities. The project proponent clearly failed in its duty to appraise EAC about serious environmental concerns which were raised during the course of the public consultation.

18. On the aspect of appraisal, it has been urged that the minutes of EAC meeting recommending the grant of an EC contain, as the learned counsel for the appellants submitted, “not a line on the EIA report”. EAC was required to state its reasons for recommending the grant of an EC in terms of the 2006 Notification. The reasons must indicate that there was an appraisal by EAC. In the present case, the recommendations of EAC are based on vague considerations such as: (i) larger public interest; (ii) non-concealment of the facts by the project proponent; and (iii) the delay which had occurred in the process. The submission urged is that EAC, as an expert body, has failed to furnish reasons; acted on the basis of considerations which are not germane to the exercise of its functions and failed to apply its mind to relevant considerations including the environmental consequences of the project.

19. Finally, it has been submitted that under Section 16(h) of the National Green Tribunal Act, 2010 (the NGT Act, 2010) an appellate remedy is provided against the order granting EC. By virtue of the provisions of Section 20, NGT is under a mandate to apply the principles of sustainable development, the precautionary principle and the polluter pays principle while passing any order, decision or making the award. An appeal lies before this Court under Section 22 from an order, decision or award of the Tribunal on a substantial question of law as specified in Section 100 of the Code of Civil Procedure, 1908. NGT, by virtue of its adjudicatory authority under Section 16(h), is entrusted with a duty to conduct a merits review. The failure to consider materials on a vital issue constitutes a substantial question of law as does the failure to consider vital issues in the proceedings before it. In the present case, the Tribunal has merely relied on the process conducted by EAC and its recommendations, abdicating its own jurisdiction to conduct a merits review.

20. Mr A.N.S. Nadkarni, learned Additional Solicitor General appearing on behalf of MoEFCC, urged that the EIA report, besides dealing with environmental concerns, addresses the impact of the project during both the phases of construction and operation. EAC is sourced from experts from outside the Government. The airport project was conceived in 1996; consultants were appointed and three sites were initially shortlisted. It was in 2011 that ToR were sought by and given to the project proponent by EAC. The draft EIA

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a was placed for public consultation in 2014 and the final EIA report came to be submitted in 2015. EAC deferred consideration of the EIA report on three occasions, including among them to consider the representation filed by the Federation of Rainbow Warriors.

21. Countering the submission of the appellants on the non-disclosure of reserved forests in Form 1, the learned ASG urged the following submissions:

b 21.1. The submission of the appellants was not raised either in the public hearing or in the grounds urged before NGT, but was addressed in the written submissions filed before NGT and when a map of the Surveyor General of India was produced.

c 21.2. Table 2.1.5 of the EIA report states that there is no reserved forest in the State of Maharashtra while delineating ESZs within 15 km from the project boundary. The report proceeded on the plain meaning of the Forest Act, 1927 according to which it is only upon the issuance of a notification under Section 20 that a reserved forest is declared.

21.3. As a matter of fact, within the area of 15 km from the project boundary in the State of Maharashtra, no reserved forest stands declared under Section 20(2) of the Forest Act, 1927.

d 21.4. The decision in *Godavarman*⁶ which adopts the ordinary meaning of the expression “forest” is site specific: MoEFCC follows it scrupulously even if there is a notification under Section 4 while considering the diversion of forest land for non-forest uses. The decision in *Godavarman*⁶ has also been explained in the decision of this Court in *Noida Memorial Complex Near Okhla Bird Sanctuary, In re*⁷ (*Okhla Bird Sanctuary*).

e 21.5. The Guidance Manual notices that environmental facets which have to be considered in relation to airport development are categorised into seven groups: (a) land use; (b) water quality; (c) air quality; (d) noise pollution; (e) biological environment; (f) socioeconomic changes and occupational health; and (g) solid waste management. Baseline data of these environmental facets is ascertained through primary data extending to one season while secondary data extending to a year is gathered in terms of the Guidance Manual and the distance specified in Para 4.1.

g 21.6. The EIA report records that the surrounding land use of the airport site is predominantly forest land. Land use and land cover specifically for a 10 km radius from the airport site in Maharashtra is also set out in Chapter II of the EIA report, which indicates a reference to the forest area. Annexure IX of the EIA report incorporates land use with land cover maps, both for Goa and Maharashtra in the 10 km radius, which includes forested areas within the State of Maharashtra; Annexure X of the EIA report elucidates surface water bodies both in Maharashtra and in Goa in the radius of 10 km while Annexure XI provides a hydrogeomorphological map of Goa and Maharashtra. In other

h 6 *T.N. Godavarman Thirumulpad v. Union of India*, (1997) 2 SCC 267

7 (2011) 1 SCC 744

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words, it was urged that: (i) a legally designated forest under the Forest Act, 1927 requires a notification under Section 20; however, at the same time, (ii) the EIA report contains a clear disclosure of the presence of forest areas in both the States of Goa and Maharashtra within a radius of 10 km including areas of dense forest.

22. As regards the lack of *sampling points* in Maharashtra, the learned ASG urged that while all the six sampling points for ambient air quality within 10 km of the study area were in Goa, the air quality which was being tracked was within the stipulated radius and was not confined to the State of Goa. Similarly, in studying the water environment, the groundwater quality was measured at four locations in Goa within 10 km of the study area. As regards the monitoring of noise, nine sampling points were chosen within the State of Goa in accordance with the Central Pollution Control Board (CPCB) guidelines. The monitoring of noise environment, both at the construction and operational phases, has similarly been dealt with in the EIA report. The learned ASG urged that the choice of the sampling locations was not arbitrary: though the sampling points were not in Maharashtra, data required was tracked across a radius of 10 km from the ARP which also included the State of Maharashtra.

23. Dealing with the submission that no avi-faunal study was carried out, it was urged that the EIA report specifically deals with this aspect in paragraph 4.6 of Chapter II which elucidates that 385 species of plants belonging to 88 plant families were documented and identified in the 10 km radial distance of the proposed project site. The study similarly dealt with faunal diversity. As many as 86 species of birds were observed in the course of the avi-faunal study, which has been elucidated in Table 4.17 of the EIA report.

24. On the issue of ESZs, the learned ASG urged that there is a specific reference to the Kasturirangan Report, under the heading of “Environmentally Sensitive Zones” in Chapter IV of the EIA report. The EIA report notices that the proposed airport site falls in Pernem Taluka of North Goa which has not been included in the ESZs mapped by HLWG. Annexure XVI of the EIA report is a notification dated 13-11-2013 (the 2013 Notification) of MoEF, which contains a list of villages (State, district and taluk-wise) identified by HLWG. Para 9 of the 2013 Notification which has been issued under Section 5 of the Environment (Protection) Act, 1986 specifies the categories of new and expansion projects which are prohibited in ESZ. The proposed airport notification project does not fall within the prohibited category. Moreover, since the site of the proposed airport was not included in an ESZ, the prohibition imposed by the 2013 Notification had no application.

25. The learned ASG has also urged that the report of HLWG on Western Ghats, submitted on 15-4-2013, stipulates certain development restrictions in ESZs which are as follows:

25.1. A complete ban on mining, quarrying and sand mining.

25.2. A complete ban on thermal power projects while hydro power projects may be permitted subjected to conditions.

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25.3. A strict prohibition on “red category” industries.

25.4. A prohibition on building and construction projects of 20,000 sq m.

a **25.5.** All other infrastructure and development projects/schemes would be subject to the grant of an EC as Category ‘A’ projects under the 2006 Notification.

25.6. All development projects within 10 km of the Western Ghats ESZ and requiring ECs shall be regulated in accordance with the 2006 Notification.

b **26.** Based on the above recommendation of HLWG, it was submitted that the proposed airport project, which falls under Category ‘A’ projects as delineated by the 2006 Notification, is regulated by it and does not attract a blanket prohibition.

c **27.** The submission that EAC had failed to apprise the environmental consequences of the project and should have applied its mind to environmental concerns has been countered by relying on the minutes of the meetings conducted by EAC.

27.1. At its 149th meeting held on 26-6-2015, EAC sought additional information on six distinct aspects upon receiving the presentation by the project proponent.

d **27.2.** At its 151st meeting held on 7-9-2015 to 9-9-2015, EAC took note of a representation filed by the Federation of Rainbow Warriors and deferred further consideration of proposal for the grant of EC. The project proponent was called upon to submit a response to the issues raised in the representation.

e **27.3.** At its 152nd meeting held on 20-10-2015, EAC dealt with clarifications issued by the project proponent to the concerns raised by Rainbow Warriors and proceeded to recommend the project for the grant of an EC subject to the stipulated conditions.

28. On 28-10-2015, EC was granted by the Union Government. On the basis of the procedure which was followed by EAC, the following submissions have been urged:

f **28.1.** The application of mind by EAC can be inferred and seen from the record.

28.2. Where considered necessary, EAC sought information outside the EIA report.

28.3. Having appraised the EIA report, EAC imposed site specific conditions.

g **28.4.** EAC consists of experts in the field and once it has been shown that all relevant considerations were borne in mind, this Court must give due deference to their view.

29. Mr K.K. Venugopal, learned Attorney General, appearing on behalf of the State of Goa, urged the following submissions:

h **29.1.** The proposed project for setting up an international airport at Mopa has been on the drawing board for nearly two decades. Successive studies were

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commissioned to assess the feasibility of the project from diverse sources, both within and outside the Government. This includes studies by private organisations as well as reports by Airports Authority of India, the International Civil Aviation Organisation and the six-member Committee constituted by the State Government under the auspices of the Chief Minister.

29.2. The setting up of an airport is an imminent need, since the existing airport at Dabolim has reached a saturation point and is unable to cater to the growing volume of passenger traffic into Goa.

29.3. Tourism, it has been urged, is a major source of revenue for the State, with the banning of mining activities. A balance must be drawn between development and the environment. A distinction needs to be drawn between overwhelming environmental objections which are not reversible and incapable of amelioration, and cases such as the present where the environmental consequences of project are capable of being countered by suitable measures.

29.4. Objections primarily based on a defect in procedure should not be sufficient to quash a project conceived in public interest with vast benefits for the development of the State and for the members of the travelling public. It was urged that there was no major environmental objection and the challenge to the EIA report is not substantial enough to overcome the interests of three million passengers. The expected inflow is anticipated to reach 30 million in 2030.

30. On the aspect of the *felling of trees*, the learned AG submitted that following the order of the Bombay High Court, the Principal Chief Conservator of Forests passed an order on 2-4-2018 providing for:

- (i) enumeration of all trees covered by the project site;
- (ii) issuance of tree felling permission by the Deputy Chief Conservator of Forests; and
- (iii) plantation of ten times the number of trees felled under the supervision of the Forest Department.

Thereafter, when the High Court was moved in a PIL, an order was passed on 13-6-2018 that the grant of permission for felling trees and the actual felling of trees will be carried out only after NGT granted permission in the pending proceedings. A miscellaneous application seeking permission for the felling of trees was instituted before NGT. In its final order dated 21-8-2018¹, NGT disposed of both the appeals as well as the miscellaneous application. Moreover, NGT has specifically dealt with the felling of trees in the course of its distinction.

31. On behalf of the concessionaire, Mr Parag P. Tripathi, learned Senior Counsel and Ms Astha Mehta, learned counsel urged that upon the grant of an EC, a concession agreement was executed by it with the State of Goa on 8-11-2016. Possession of the project site was handed over on 4-9-2017 and work commenced on 3-3-2018. The indicative capital for Phase 1 of the development is Rs 1900 crores while the cost of the entire project is likely to

¹ *Federation of Rainbow Warriors v. Union of India*, 2018 SCC OnLine NGT 831

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a be Rs 3000 crores. The State of Goa has incurred a total expenditure of Rs 240 crores for land acquisition, rehabilitation, road widening, consultancy and other related aspects while the concessionaire has thus far incurred an expenditure of Rs 230 crores as on 18-1-2019. 14.06% of the project work has been completed and a manpower consisting of 1500 persons has been mobilised at the site together with plant and machinery.

b **32.** The concessionaire has stated that it has tied up with a consortium of banks and the servicing of the loans is linked to project milestones. As on 18-1-2019, the major works in progress included:

(i) site preparation and earth works such as excavation and filling up of runways, taxiways, aprons and parking bays;

(ii) PTB-foundations and column works; and

(iii) excavation of the foundations for the ATC building.

c The concessionaire has submitted that apart from the plantation of ten trees for every single tree which has been felled, the Forest Department identified about 500 trees for transplantation, which process is being carried out. In this background, it has been submitted that the project should not be interdicted. The concessionaire, it has been urged, is committed to the completion of the project which accords with all the approvals that have been received.

d **33.** The rival submissions now fall for our consideration.

C. Scheme of the 2006 Notification and the Guidance Manual for Airports

C. 1. EIA Process

e **34.** The objective of the EIA process is to ensure that environmental and developmental concerns are appropriately balanced on the basis of the most accurate information available.

f **35.** The Constitution (Forty-second Amendment) Act, 1976, which came into force with effect from 3-1-1977, inserted Article 48-A to the Constitution which mandates that the State shall endeavour to protect and improve the environment and safeguard the forests and wildlife of the country. Article 51-A(g) of the Constitution places a corresponding duty on every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures. Following the decisions taken at the United Nations Conference on the Human Environment held at Stockholm (the Stockholm Conference) in June 1972 in which India participated, Parliament enacted the Environment (Protection) Act, 1986 to protect and improve the environment and prevent hazards to human beings, other living creatures, plants and property.

g **36.** On 27-1-1994, MoEF, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of Section 3 of the 1986 Act read with clause (d) of sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, issued a notification, S.O. 60(E) (the 1994 Notification) imposing restrictions and prohibitions on the expansion and modernisation of any activity

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or new project unless an EC was granted under the procedure stipulated in the notification. Under the notification, any person undertaking a new project or expanding and modernising an existing project was required to submit an application to the Secretary, Ministry of Environment and Forests, New Delhi.

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37. The application, which was to be made in accordance with the schedule provided in the notification was to be submitted with a project report which included with it an EIA report, an Environment Management Plan (EMP) and the details of a public hearing which had been carried out in accordance with guidelines issued by the Central Government from time to time. Limited exceptions to the public hearing process and the submission of an EIA were provided.

b

38. MoEF as the Impact Assessment Agency (IAA) would then evaluate the application and reports submitted. IAA was empowered to constitute a committee of experts, if necessary, which would have a right of entry into and inspection of the site during or after the commencement of the preparations relating to the project. IAA would prepare a set of recommendations based on the documents furnished by an applicant within 90 days from the receipt of the documents and a decision would be conveyed to the applicant within 30 days thereafter. EC granted was valid for a period of five years and a successful applicant was required to submit half-yearly reports to IAA. Concealing factual data or submitting false or misleading information would make the application liable for rejection and would lead to the cancellation of any EC granted on that basis.

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39. The 1994 Notification was amended to reflect the growing protection accorded to the environment.

40. On 14-9-2006, MoEF released another notification, S.O. 1533 (the 2006 Notification) in supersession of the previous notification. The 2006 Notification directed thus:

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“...on and from the date of its publication the required construction of new projects or activities or the expansion or modernisation of existing projects or activities listed in the schedule to this notification entailing capacity addition with change in process and or technology shall be undertaken in any part of India only after the prior environmental clearance from the Central Government or as the case may be, by the State Level Environment Impact Assessment Authority, duly constituted by the Central Government under sub-section (3) of Section 3 of the said Act, in accordance with the procedure specified hereinafter in this notification.”

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41. There are significant differences between the 1994 Notification and the 2006 Notification. They are:

41.1. The 2006 Notification categorically states that an EC must be granted by the regulatory authority prior to the commencement of any construction work or preparation of land.

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41.2. The 2006 Notification divides all projects into Category 'A' and Category 'B' projects. MoEFCC continues to regulate projects of large scale (Category 'A'), while SEIAAs regulate comparatively smaller projects (Category 'B').

41.3. Under the 1994 Notification, an applicant was required to submit an application along with all reports including the EIA report at the time of the application. Under the 2006 Notification, prior to the preparation of the EIA report by the applicant, the authority concerned formulates comprehensive ToR on the basis of the information furnished by the applicant addressing all relevant environmental concerns. This forms the basis for the preparation of the EIA report. A pre-feasibility report must also be submitted with the application unless exempted in the notification. Under the 2006 Notification, a draft EIA is first prepared and it is only after the public consultation process that a final EIA report must be prepared addressing all the concerns raised during public consultation.

41.4. The 2006 Notification stipulates the creation of a regulatory body at the State level — SEIAA comprising members with expertise in the field of environmental laws which is charged with granting ECs for Category 'B' projects.

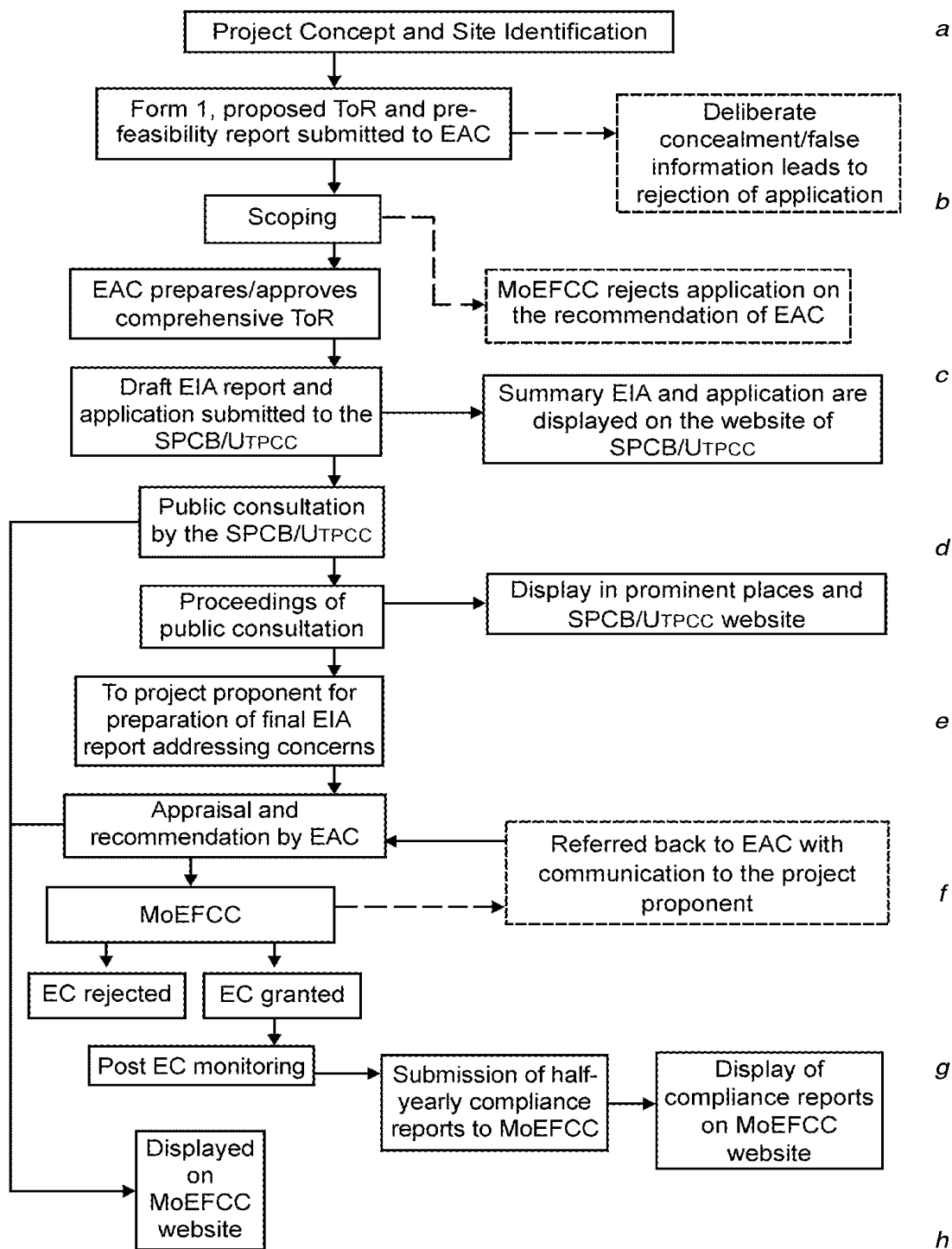
41.5. Under the 1994 Notification, the final approval was granted by IAA. Under the 2006 Notification, though the final regulatory approval is granted by MoEFCC or SEIAA, as the case may be, the approval is to be based on the recommendations of EAC functioning in MoEFCC or the State Expert Appraisal Committees (SEAC) which are constituted for that specific purpose.

41.6. Under the 2006 Notification, the application can be rejected by the regulatory authority on the basis of the recommendation of EAC or SEAC, as the case may be, at the preliminary stage itself, prior to public consultation.

41.7. Under the 1994 Notification, the public hearing process was overseen by the State Pollution Control Boards (SPCB) which would constitute a public hearing panel for the purpose. Under the 2006 Notification, the public consultation process is expanded to include the receipt of written comments from persons concerned. The public hearing component was to be overseen by SPCBs or the Union Territory Pollution Control Committee (UTPCC).

42. The salient objective which underlies the 2006 Notification is the protection, preservation and continued sustenance of the environment when the execution of new projects or the expansion or modernisation of existing projects is envisaged. It imposes certain restrictions and prohibitions based on the potential environmental impact of projects unless prior EC has been granted by the authority concerned. EC is required before any construction work, or preparation of land (except for securing the land) is started on the project or activity listed in the schedule to the notification. The process stipulated under the 2006 Notification is illustrated by the following flowchart:

EIA Process for Category 'A' projects



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- 43.** Based on the spatial extent of the potential impact and the potential impacts on human health and natural and man-made resources, the 2006 Notification categorises all projects into Category 'A' and Category 'B' projects. MoEFCC in the Central Government and SEIAA at the State level constitute the regulatory authorities for the purposes of the notification. Category 'A' projects require prior environmental clearance from MoEFCC, based on the recommendation of EAC constituted by the Central Government for this purpose. Category 'B' projects will require prior environmental clearance from SEIAA, based on the recommendations of SEAC. Where no SEIAA or SEAC has been constituted, Category 'B' projects are treated as Category 'A' projects.
- 44.** Once a prospective site has been identified by the applicant for the proposed project, all applications seeking an EC shall be made in the prescribed Form 1 and Supplementary Form 1-A⁸, if applicable. The application must be submitted prior to the commencement of any construction activity, or preparation of the land at the site. A pre-feasibility report must also be submitted with the application except in the cases of construction projects in Item 8 of the Schedule, for which a conceptual plan must be submitted. The significance of the information furnished by the applicant in Form 1 shall be explored shortly.
- 45.** The process to obtain environmental clearance as stipulated by the notification for *new* projects⁹ comprises a maximum of four stages, all of which may not apply depending on the specific case stipulated under the notification:
1. Screening;
 2. Scoping;
 3. Public Consultation; and
 4. Appraisal.

Screening

- 46.** This step is restricted only to Category 'B' projects. This stage entails an examination of whether the proposed project or activity requires further environmental studies for the preparation of an EIA for its appraisal prior to the grant of an EC. Those projects requiring an EIA are further categorised as Category 'B1' projects and remaining projects are categorised as Category 'B2' projects. Category 'B2' projects do not require an EIA. The categorisation is in accordance with the guidelines issued in this regard by MoEFCC from time to time.

⁸ Only for construction projects listed under Item 8 of the Schedule.

⁹ Applications for EC for expansions or modernisation of *existing* units as stipulated under the notification are made in Form 1 and shall be considered by EAC or SEAC within 60 days, which will decide on the due diligence necessary including the preparation of the EIA and public consultations and the application shall be appraised accordingly for the grant of environmental clearance.

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Scoping

47. At this stage, EAC or SEAC, as the case may be, formulates detailed and comprehensive terms of reference which address all relevant environmental concerns for the preparation of the EIA. Amongst other things, the information furnished by the applicant in Form 1/Form 1-A along with the proposed ToR by the applicant form the basis for the preparation of ToR. ToR must be conveyed to the applicant within 60 days of the receipt of Form 1, failing which, ToR proposed by the applicant shall be deemed as approved. Significantly, applications for EC may be rejected by the regulatory authority at this stage itself on the recommendation of EAC or SEAC, as the case may be, and the decision along with reasons is to be communicated to the applicant within 60 days of receipt of application. a
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Public Consultation

48. Prior to this stage, a summary EIA is prepared in the format given in Appendix IIIA on the basis of ToR furnished to the applicant. This stage involves the process “by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view of taking into account all the material concerns in the project or activity design as appropriate”. The detailed procedure is stipulated in Appendix IV. Subject to the exceptions provided in the 2006 Notification, all Category ‘A’ and Category ‘B1’ projects shall undertake the public consultation process. This stage comprises of two components: c
d

(i) A public hearing at the site or in its close proximity — district-wise to be carried out in the manner prescribed in Appendix IV; and

(ii) Procurement of written responses from persons concerned having a plausible stake in the environmental aspects surrounding the project. e

49. The State Pollution Control Board (SPCB) or the Union Territory Pollution Control Committee (UTPCC) is charged with conducting the public hearing in the manner stipulated in Appendix IV and forwarding the proceedings to the regulatory authority within 45 days of a request from the applicant. The regulatory authority is empowered to engage another public agency or authority to carry out the process within a further period of forty-five days in case SPCB or UTPCC does not adhere to the prescribed time period stipulated in the notification. The public hearing should be arranged in a “systematic, time-bound and transparent manner” to ensure the “widest possible public participation at the project site(s) or in its close proximity district-wise”. The public hearing proceeding is filmed and a copy of the video is submitted to the regulatory authority concerned. f
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50. Within seven days of receiving a written request to initiate the public consultation process, SPCB or UTPCC shall place the summary EIA and the application on their website and invite responses. The authority concerned may also make use of other appropriate media in addition to publication on their website to ensure wide publicity of the project. On a written request from any person concerned, the authority will make available a hard copy of the draft h

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a EIA for inspection at a notified place during office hours till the date of the public hearing. A duty is placed on the authority to forward all responses and comments received at this stage to the applicant through the quickest available means.

b **51.** After the public consultation process, the applicant is duty-bound to address all the material environmental concerns expressed during the process and make appropriate changes to the draft EIA and EMP. The applicant shall then forward the final EIA report to the regulatory authority to initiate the next stage. Alternatively, the applicant may submit a supplementary report to the summary EIA and EMP.

Appraisal

c **52.** This stage involves detailed scrutiny by EAC or SEAC of all the documents submitted by the applicant for the grant of EC. The appraisal is carried out in a transparent manner in a process to which the applicant shall be invited for furnishing clarification in person or through an authorised representative. Appendix V stipulates that the following documents are also submitted to the regulatory authority:

- d (i) Final EIA report
(ii) A copy of the video tape or CD of the public hearing proceedings
(iii) A copy of the final layout plan
(iv) A copy of the project feasibility report.

e **53.** The regulatory authority must examine the documents “strictly with reference to ToR” and communicate any inadequacy to EAC or SEAC, as the case may be, within 30 days of receipt of the documents. Within sixty days of the receipt of all the documents, EAC or SEAC, as the case may be, shall complete the appraisal process as prescribed in Appendix V. Within the next fifteen days, EAC or SEAC shall make categorical recommendations to the regulatory authority concerned to either grant EC on the stipulated terms and conditions or reject the application, together with reasons. The appraisal of projects which are not required to undergo the public consultation process or the submission of an EIA is to be carried out on the basis of the prescribed application Form 1 or Form 1-A, as applicable.

g **54.** MoEFCC or SEIAA shall thereafter consider the recommendations of EAC or SEAC and convey its decision to the applicant within 45 days of receipt of the recommendations. The regulatory authorities shall *normally* accept the recommendations of EAC or SEAC, as the case may be. Where there is a disagreement, the regulatory authority shall ask for a reconsideration of the recommendation within 45 days of the receipt of the recommendations. This decision shall be conveyed to the applicant. EAC or SEAC shall then reconsider its recommendation within a further period of 60 days and make its recommendations to the regulatory authority. The regulatory authorities shall then take a decision after considering the views communicated to it and convey the decision to the applicant within the next 30 days.

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55. If no decision is communicated to the applicant within the time prescribed, the applicant may proceed according to the recommendation of EAC or SEAC recommending either the grant or rejection of EC. The decision of the regulatory authority and the final recommendations of EAC or SEAC shall be public documents on the expiry of the prescribed timelines. Deliberate concealment and/or the submission of false or misleading information material to the steps involved in the grant of an EC make the application liable for rejection and cancellation of any EC granted on that basis.

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56. The 2006 Notification embodies the notion that the development agenda of the nation must be carried out in compliance with norms stipulated for the protection of the environment and its complexities. It serves as a balance between development and protection of the environment: there is no trade-off between the two. The protection of the environment is an essential facet of development. It cannot be reduced to a technical formula. The notification demonstrates an increasing awareness of the complexities of the environment and the heightened scrutiny required to ensure its continued sustenance, for today and for generations to come. It embodies a commitment to sustainable development. In laying down a detailed procedure for the grant of an EC, the 2006 Notification attempts to bridge the perceived gap between the environment and development.

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57. It is for this reason that EAC and SEAC comprise experts in the field of environmental law. The Chairperson of EAC shall be a person who is an “outstanding and experienced environmental policy expert or expert in management or public administration with wide experience in the relevant development sector”. Appendix VI to the 2006 Notification stipulates that EAC and SEAC comprise 15 members who are either “experts” or “professionals”. Experts must have at least 15 years of relevant experience in the field or an advanced degree (PhD) with 10 years of relevant experience. Where experts are not available, professionals may be appointed to EAC.

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58. EAC and SEAC are charged with evaluating the information submitted by the applicant in Form 1/Form 1-A and preparing comprehensive ToR which guide the preparation of the EIA reports. Given that these bodies comprise experts in the field of environmental law, the recommendation of EAC or SEAC to grant EC to an applicant or reject the application is *normally* accepted by the regulatory authority.

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59. The regulatory authority at the State level (SEIAA) which is charged with the approval or rejection of an application for EC comprises three members who possess the qualifications in the field as prescribed in Appendix VI. Significantly, sub-clause (7) of Para 3 of the 2006 Notification stipulates that all decisions of SEIAA shall be unanimous and taken in a meeting. Given the environmental consequences of a proposed project, no difference of opinion is provided for in the grant of an EC at the State level. It is further mandated that the project management submit half-yearly compliance reports to the regulatory authority in respect of EC and conditions.

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- 60.** Under the 2006 Notification, the process of obtaining an EC commences from the production of the information stipulated in Form 1/Form 1-A. Crucial information regarding the particulars of the proposed project is sought to enable EAC or SEAC to prepare comprehensive ToR which the applicant is required to address during the course of the preparation of the EIA. Some of the information sought is produced thus:
- 60.1.** Construction, operation or decommissioning of the project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.).
- 60.2.** Use of natural resources for construction or operation of the project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply).
- 60.3.** Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about the actual or perceived risks to human health.
- 60.4.** Production of solid wastes during construction, operation or decommissioning.
- 60.5.** Release of pollutants or any hazardous, toxic or noxious substances to air.
- 60.6.** Generation of noise and vibration, and emissions of light and heat.
- 60.7.** Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea.
- 60.8.** Risk of accidents during construction or operation of the project, which could affect human health or the environment.
- 60.9.** Environment sensitivity which includes, amongst other things, the furnishing of the following details:
- 60.9.1.** Areas protected under international and national legislation.
- 60.9.2.** Ecologically sensitive areas.
- 60.9.3.** Areas used by protected, important or sensitive species of flora or fauna.
- 61.** Under the 2006 Notification, EC process is based on the information provided by the applicant in Form 1. That the information provided in Form 1 is crucial can be borne from the following circumstances:
- 61.1.** EAC or SEAC, as the case may be, formulates comprehensive ToRs on the basis of the information furnished in Form 1 which addresses all possible environmental concerns. It is on the basis of ToR, that further studies and the EIA are carried out on the impact of the proposed project on the environment.
- 61.2.** At the appraisal stage, the regulatory authority examines the documents submitted by the applicant “strictly with reference to ToR” and communicates any inadequacy to EAC or SEAC.

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61.3. Category B2 projects, which do not require scoping, are evaluated by SEAC on the basis of the information furnished by the applicant in Form 1 alone.

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61.4. The appraisal of all projects or activities which are not required to undergo public consultation, or submit an EIA report, shall be carried out on the basis of the prescribed application Form 1 and Form 1-A as applicable.

61.5. An application for extension of the validity of EC for certain projects is to be made by submitting a revised Form 1 within the validity period.

62. The information provided in Form 1 serves as a base upon which the process stipulated under the 2006 Notification rests. An applicant is required to provide all material information stipulated in the form to enable the authorities to formulate comprehensive ToR and enable persons concerned to provide comments and representations at the public consultation stage. The depth of information sought in Form 1 is to enable the authorities to evaluate all possible impacts of the proposed project and provide the applicant an opportunity to address these concerns in the subsequent study. Missing or misleading information in Form 1 significantly impedes the functioning of the authorities and the process stipulated under the notification. For this reason, any application made or EC granted on the basis of a defective Form 1 is liable to be rejected immediately. Clause (vi) of Para 8 of the notification provides thus:

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“Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection, and cancellation of prior environmental clearance granted on that basis. Rejection of an application or cancellation of a prior environmental clearance already granted, on such ground, shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice.”

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C.2. Guidance Manual for Airports

63. In February 2010, MoEF brought out its Guidance Manual for Airports. The need for a sector specific manual arose because the 2006 Notification “re-engineered the entire EC process” under its earlier avatar of 1994 and new sectors were incorporated into the ambit of EC process. The 2006 Notification noted that as many as 39 developmental sectors require prior ECs. Sector specific manuals, it was hoped, would bring about standardisation in the quality of appraisal and obviate potential inconsistencies between the work performed by SEIAAs and SEACs. Chapter IV of the Guidance Manual, which is titled “Description of Environment”, prescribes the study area for carrying out an EIA:

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“Primary data through measurements and field surveys; and secondary data from secondary sources are to be collected in the study area within 10 km radius from Aerodrome Reference Point (ARP). Primary data should cover one season other than monsoon and secondary data is to cover one full year. The basis for selection of these criteria is that the aircraft gains

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a a height of 1000 ft in this area below which noise and air pollution are generated maximum during its take off stage. Secondary data should be collected within 15 km aerial distance for the parameters as specifically mentioned at Column 9(III) of Form I of the EIA Notification, 2006. Details of secondary data, the method of collection of secondary data, should be furnished. Similarly, the proposed locations of monitoring stations of water, air, soil and noise, etc. should be shown on the study area map.”

b **64.** Baseline data of environmental parameters which may be affected by airport activities is collected through primary monitoring in the study area and through secondary sources. The baseline data facilitates the evaluation of the predicted impact on environmental attributes in the study area by using scientific analysis and EIA methodologies. The object is to also aid in the preparation of an EMP that would outline measures for improving environmental quality as well as retain the scope for future expansions in a sustainable manner. The Guidance Manual specifically requires collection of baseline data on the following: (i) land environment; (ii) water environment; c (iii) air environment; (iv) noise environment; (v) biological environment; (vi) socioeconomic environment; and (vii) solid waste.

d **65.** The importance of collecting data on land environment is emphasised in the following extract:

e “The terrain and hill slope, general slope and elevation of the area, the flow direction of streams and rivers, the water bodies and wetlands and the vegetation which together describe the physiography of the land, will control the drainage pattern in the region. Land farms, terrain, may get affected due to construction of airport. It may require large-scale quarrying, dredging and reclamation, which may cause changes in the topography. This in turn may affect the drainage pattern of the land/terrain. Baseline data pertaining to existing land at the proposed project area including the description of terrain hill slopes, terrain features, slope and elevation are to be collected. Study of land use pattern, habitation, cropping pattern, forest cover, environmentally sensitive places, etc., is to be undertaken f by employing remote sensing techniques and ground truthing. Ecological features of forest area; agricultural land; grazing land; wildlife sanctuary land and national parks; migratory routes of fauna; water bodies; and drainage pattern including the orders of the drain and watersheds are to be described. Settlements in the study area may be delineated with respect to ARP on the site map. High rise buildings, industrial areas and zones, g slaughterhouses and other features of flight safety importance may also be marked on the map. Secondary data from Central Water Board, GOI; State Groundwater Department, State Irrigation Department is to be obtained. Geomorphology of the region is to be clearly delineated. Study of land use patterns, habitation, cropping pattern, and forest cover data is undertaken. Information on the location of water bodies, drainage, forests, surface travel h routes with respect to the project site is obtained within the study area and plotted on a map. This map will show the natural slopes and the drainage

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patterns, which give a guideline while planning the drains in the airport project. The drains help in discharge of storm water from the airport to avoid flooding and waterlogging in the project area.”

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66. The study of the water environment is necessitated for the following reasons:

“Groundwater quality is important, as change in its chemical parameters will affect the water quality. Airport activities during construction/operation may have impact on groundwater quality. Due to airport construction, existing low areas may be reclaimed with dredged spoil. The pollutants from dredged spoil are likely to enter into the groundwater. This is likely to increase sedimentation of pollutants in airport area, which may migrate in time to the neighbouring groundwater. Also runoff from solid waste, if any, may percolate into the ground and may contaminate the groundwater. Hence, they need to be studied through primary surveys and secondary sources. Monitoring locations are to be finalised as per CPCB norms which can represent the baseline conditions.”

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67. On the aspect of air environment, the Guidance Manual emphasises that:

“Aircraft engines produce emissions that are similar to other emissions resulting from any oil-based fuel combustion. These, like any exhaust emissions, can affect local air quality at ground level. It is emissions from aircraft below 1000 ft, above the ground (typically around 3km from departure or, for arrivals, around 6 km from touchdown) that are chiefly involved in influencing local air quality. These emissions disperse with the wind and blend with emissions from other sources such as emissions from domestic sources, emissions from industries and from surface transport.”

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Local emissions attributed to aircraft operations at airports include oxides of nitrogen (NOx), carbon monoxide (CO), hydrocarbons (HC), sulphur dioxide (SO₂), and particulate matter (PM 10 and PM 2.5).

68. The Guidance Manual brings into focus the biological environment. It acknowledges that airport operations may alter ecosystems, threaten endangered species and disturb the movement and breeding patterns of wildlife. In this context, the collection of baseline data on sensitive habitats and wild or endangered species in the project area is contemplated. The Guidance Manual stipulates thus:

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“Airport operations may cause change in local ecosystems, threaten endangered species, and disturb movements and breeding patterns of local wildlife. Airports are located within a variety of settings (both urban and rural), which support habitats and species of their own, some of which will have direct interaction with those located on the airport and vice versa. Some local areas will also be designated for their nature conservation value. The biological environment of the airport should hence be seen as

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an integral component of the wider landscape scale ecological network. To accomplish this:

- a (i) Baseline data from field observations for various terrestrial and aquatic systems are to be generated.
- (ii) Comparison of the data with authentic past records to understand changes is undertaken.
- (iii) Environmental components like land, water, flora and fauna are characterised and,
- b (iv) The impact of airport development on vegetation structure in and around project site is to be understood.

Data on sensitive habitats, wild or endangered species in the project area also is to be collected from Zoological Survey of India (ZSI), Botanical Survey of India (BSI), Wildlife Institute of India (WII) and Ministry of Earth Sciences. Wildlife symbolises the functioning efficiency of the entire ecosystem. Just as wild flora needs special treatment for preservation and growth, wild fauna as well deserves specific conservatory pursuits for posterity. As per the Wildlife Act (1972), the various wild animals are enlisted in the schedules of the Wildlife Act based on the intensity of threat to them as rare, endangered, threatened, vulnerable, etc. Primary data on survey of the wild animals and birds in the study area is collected and identified with the classification into various schedules taken from secondary data.”

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- 69. It is in the backdrop of the 2006 Notification and the Guidance Manual that it becomes necessary to assess the process that was adopted in the present case and its outcome.

e **D. Forests**

70. The essence of the challenge to EC is twofold:

- f 70.1. Form 1, which was filed by the project proponent, did not contain any disclosure of the name or identity of forests within an aerial distance of 15 km. Item 2 under the heading of “Environmental Sensitivity” requires a clear disclosure of “areas which are important or sensitive for ecological reasons — wetlands, water sources or other water bodies, coastal zone, biospheres, mountains and forests”.

- g 70.2. Table 2.1 of Chapter II of the EIA report delineates ESZs within an aerial distance of 15 km from the project boundary. For the State of Goa, the table indicates the presence of forests but not of protected forests. For the State of Maharashtra, Table 2.1 indicates that there were neither reserved nor protected forests within 15 km from the project boundary.

- h 71. The learned ASG made an earnest effort to support this by urging that a reserved forest is one which is notified under Section 20 of the Forest Act, 1927. The issuance of a notification under Section 4, it was urged, is indicative only of an intent and a forest stands reserved under sub-section (2) of Section 20 only upon the issuance of a notification. The ASG submitted that the reliance which the appellants placed on the Survey of India map is misplaced as, in the absence of a notification under Section 20, a forest cannot be regarded as being

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reserved. In the alternative, it was urged that as a matter of fact, the EIA report (save and except Table 2.1) takes into account the forest cover surrounding the site and within the prescribed aerial distance. As regards Form 1, the learned ASG submitted that at that stage, the project proponent may not be expected to be aware of all the features of the environment and hence, the omission to refer to forests and other areas which are sensitive ecologically should be discountenanced.

72. We cannot gloss over the patent and abject failure of the State of Goa as the project proponent in failing to disclose wetlands, water sources, water bodies, biospheres, mountains and forests within an aerial distance of 15 km as required by Form 1. The disclosure in Form 1 constitutes the very foundation of the process which is initiated on the basis of the information supplied by the project proponent. Following the disclosure in Form 1, ToR are formulated, and this leads to the preparation of the EIA report. A duty is cast upon the project proponent to make a full, complete and candid disclosure of all aspects bearing upon the environment in the area of study. The project proponent cannot profess an ignorance about the environment in the study area. The project proponent is bound by the highest duty of transparency and rectitude in making the disclosures in Form 1.

73. There can be no manner of doubt that Form 1 is an important ingredient in the entire process envisaged under the 2006 Notification. Hence, clause (vi) of Para 8 of the 2006 Notification provides that deliberate concealment or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection and lead to the cancellation of a prior EC granted on that basis. The declaration which is required of the project proponent is to a similar effect.

74. We are unable to accept the submission that the disclosure required was of reserved forests comprehended within a notification under sub-section (2) of Section 20 of the Forest Act, 1927. Form 1 requires a disclosure of areas which are important or sensitive for ecological reasons, among them, being “forests”. The expression “forests” is used without reference to a statutory or artificial definition and must hence incorporate a meaning which bears upon the ordinary description of the term. The expression “forests”, means a forest as commonly understood, without reference to a notification under the Forest Act, 1927 or any other statutory enactment. Such an interpretation will subserve the purpose of an EIA. The purpose is to ensure that all relevant facets of the environment are noticed, that baselines are documented, and that the potential impact of a project or activity on the environment is assessed. Forests are forests without reference to recognition in a statutory form devised for a specific purpose.

75. The need to construe the expression “forests” in a broad and generic sense was emphasised in the decision of this Court in *Godavarman*⁶. This Court held: (SCC pp. 269-70, para 4)

“4. The Forest (Conservation) Act, 1980 was enacted with a view to check further deforestation which ultimately results in ecological imbalance; and therefore, the provisions made therein for the conservation

⁶ *T.N. Godavarman Thirumulpad v. Union of India*, (1997) 2 SCC 267

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a of forests and for matters connected therewith, must apply to all forests irrespective of the nature of ownership or classification thereof. The word “forest” must be understood according to its dictionary meaning. This description covers all statutorily recognised forests, whether designated as reserved, protected or otherwise for the purpose of Section 2(i) of the Forest (Conservation) Act. The term “forest land”, occurring in Section 2, will not only include “forest” as understood in the dictionary sense, but also any area recorded as forest in the government record irrespective of the ownership.”

b 76. Subsequently, in *Okhla Bird Sanctuary*⁷, this Court explained the position: (SCC p. 762, para 35)

c “35. Almost all the orders and judgments of this Court defining “forest” and “forest land” for the purpose of the FC Act were rendered in the context of mining or illegal felling of trees for timber or illegal removal of other forest produce or the protection of national parks and wildlife sanctuaries.”

d In *Okhla Bird Sanctuary*⁷, trees had been planted with an intent to set up an urban park. This Court found it “inconceivable” that those trees would turn into a forest “within a span of ten to twelve years and the land, which was for agricultural use would be converted into forest land”. Hence, the decision was based on a factually distinguishable situation. The decision emphasises that in construing the term “forest”, courts must have due regard both to text and to context.

e 77. In the context of the 2006 Notification and the underlying purpose of facilitating an EIA report, the expression “forests” must receive its ordinary and natural connotation. The effort must not be to overlook and destroy forests but to notice and protect them.

f 78. Having said this, we must delve into the alternate submission that the EIA report does, as a matter of fact, consider the prevalence of forested areas both in Goa and in Maharashtra within the study area. In this context, Para 2 of the Executive Summary introducing the EIA report acknowledges that the “surrounding land use of the airport site is predominantly forest land”. In the context of land environment, the EIA report records that “forest is the predominant land use in the study area”. The EIA report acknowledges that territories in Maharashtra fall within one kilometre from the proposed greenfield airport. Villages falling in Goa and Maharashtra within the 10 km radius were considered for assessment. Para 2.3.1 of Chapter II deals with land use. Land use/Land cover statistics for a 10 km radius from the Mopa airport in the State of Maharashtra have been tabulated. Among them is the following:

Sl. No.	Description	Area (sq m)	Area (ha)
5.	Forest-Tree Clad Area-Dense	6,63,41,913.84	6634.19

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⁷ *Noida Memorial Complex Near Okhla Bird Sanctuary, In re*, (2011) 1 SCC 744

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Similarly Para 4.4 in Chapter IV, which is titled “description of environment statistically”, provides thus:

“Surrounding land use of the airport site is predominantly forest land. The northern and eastern side of site is reserve forest areas, whereas western side is barren and village cultivated land. The existing land use plan is attached as Annexure IX.” a

79. The presence of a “diverse system set as dense and open forest, cultivated lands, sand dune vegetation, wetlands and human habitation” is noticed in Para 4.6 dealing with the biological environment. Annexure IX to the EIA report provides land use/land cover maps for both Goa and Maharashtra in the study area. The maps in Annexure IX cover forested areas in Maharashtra and Goa within an aerial boundary of 10 km from the project site. Annexure XI contains the hydrogeomorphological maps for Goa and Maharashtra. b

80. Though the EIA report adverts to the presence of forests within the study area in Goa and Maharashtra, we have to consider whether this by itself warrants the grant of an EC in spite of the fact that there has been a patent failure on the part of the project proponent to make a transparent and candid disclosure of material facts in Form 1. Information furnished in Form 1 is crucial to the preparation of ToR by EAC. EAC comprises of experts. It is constituted, among other reasons, for the specific purpose of assessing the information furnished in Form 1 and preparing comprehensive ToR. There is an intrinsic link between the disclosures in Form 1 which constitute the basis for formulating ToR and between the ambit of the EIA report required by ToR and the final EIA report. ToR guide the preparation of the EIA report. A failure to disclose information in Form 1 impairs the functioning of EAC in the preparation of ToR and in consequence, leads to preparation of a deficient EIA report. c

81. The submission that the EIA report deals with the prevalence of forested areas and warrants the grant of an EC cannot be accepted for yet another reason. EACs and SEACs are conferred with the authority to reject applications for the grant of an EC at the stage of scoping itself, prior to the preparation of ToR. The application may be rejected on the basis of the information furnished by the project proponent in Form 1. Claiming an EC as a matter of right merely because the EIA report has assessed parameters that were omitted in Form 1, bypasses the authority of EAC and SEAC to reject an application at the preliminary stage and cannot be countenanced. The regulatory authority is required to assess the final documents submitted to it “strictly with reference to ToR” and communicate to EAC and SEAC any discrepancies between the EIA report and ToR. A deficient ToR on the basis of the non-disclosure of material information in Form 1 impedes this process. d

82. The failure on part of a project proponent to disclose material information in Form 1 as stipulated under the 2006 Notification has a cascading effect on the salient objective which underlies the 2006 Notification. The 2006 Notification represents an independent code with the avowed objective of balancing the development agenda with the protection of the environment. An applicant cannot claim an EC, under the 2006 Notification, based on substantial or proportionate compliance with the terms stipulated in the notification. The e

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- a terms of the notification lay down strict standards that must be complied with by an applicant seeking an EC for a proposed project. The burden of establishing environmental compliance rests on a project proponent who intends to bring about a change in the existing state of the environment. Whereas, in the present case, there has thus been a patent failure on the part of the project proponent to make mandatory disclosures stipulated in Form 1 under the 2006 Notification, that must have consequences in law. There can be no gambles with the environment: a “heads I win, tails you lose” approach is simply unacceptable; unacceptable if we are to preserve environmental governance under the rule of law.

E. Ecologically Sensitive Zones (ESZs)

83. The substratum of the case of the appellants is based on the following extract contained in the EIA report:

- c “Ecologically Sensitive Zones, Ministry of Environment and Forests had constituted a High-level Working Group (HLWG) under the Chairmanship of Dr K. Kasturirangan, Member (Science), Planning Commission vide office order dated 17-8-2012 to study the preservation of the ecology, environmental integrity and holistic development of the Western Ghats in view of their rich and unique biodiversity.
- d HLWG submitted its report to MoEF on 15-4-2013. HLWG identified 37% of natural landscape having high biological richness, low forest fragmentation, low population density and containing protected areas, world heritage sites and tiger and elephant corridors as ecologically sensitive areas (ESA). The present proposed airport site is falling under Pernem Taluka of North Goa District. The Pernem Taluka has not been included in the ecologically sensitive areas submitted by HLWG. MoEF order on ESA is attached as Annexure XVI.”

- 84.** According to Ms Shenoy, the EIA report notices the Kasturirangan Report submitted on 15-4-2013. The submission is that the EIA report has conveniently glossed over the areas adverted to by the Kasturirangan Report as an ESZ. This includes those areas which fall within the study area on the ground that Pernem Taluka, where the project site is situated, has not been included as an ESZ. In this context, reliance is placed on a draft notification dated 3-10-2018 issued by MoEFCC under which the Union Government has proposed to notify 56,825 sq m spread across six States — Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu as the Western Ghats ESZ. The preamble to the draft notification adverts to the steps taken by the Union Government between 2013 and 2016 in pursuance of the report of the HLWG. This includes draft notifications issued on 10-3-2014 and 4-9-2015. The draft notification dated 3-10-2018 emphasises the importance of the Western Ghats as a global biodiversity hot spot:

- h “WHEREAS, Western Ghats is an important geological landform on the fringe of the west coast of India and it is the origin of Godavari, Krishna, Cauvery and a number of other rivers and extends over a distance of approximately 1500 km from Tapti River in the north to Kanyakumari

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in the south with an average elevation of more than 600 m and traverses through six States, namely, Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu;

AND WHEREAS, Western Ghats is a global biodiversity hotspot and a treasure trove of biological diversity and it harbours many endemic species of flowering plants, endemic fishes, amphibians, reptiles, birds, mammals and invertebrates and it is also an important centre of evolution of economically important domesticated plant species such as pepper, cardamom, cinnamon, mango and jackfruit;

AND WHEREAS, Western Ghats has many unique habitats which are home to a variety of endemic species of flora and fauna such as Myristica swamps, the flat-topped lateritic plateaus, the Sholas and wetland and riverine ecosystems;

AND WHEREAS, UNESCO has included certain identified parts of Western Ghats in the UNESCO World Natural Heritage List because Western Ghats is a centre of origin of many species as also home for rich endemic biodiversity and hence a cradle for biological evolution;"

85. Ms Shenoy has emphasised that sixteen villages in the taluka of Sawantwadi of the district of Sindhudurg which fall within the study area have been mapped as an ESZ in the annexure to the draft notification dated 3-10-2018. They are:

<i>State</i>	<i>District</i>	<i>Taluk</i>	<i>Village Name</i>
Maharashtra	Sindhudurg	Sawantwadi	Tamboli
Maharashtra	Sindhudurg	Sawantwadi	Kumbhavade
Maharashtra	Sindhudurg	Sawantwadi	Degave
Maharashtra	Sindhudurg	Sawantwadi	Banda
Maharashtra	Sindhudurg	Sawantwadi	Padve Majgaon
Maharashtra	Sindhudurg	Sawantwadi	Ronapal
Maharashtra	Sindhudurg	Sawantwadi	Padve
Maharashtra	Sindhudurg	Sawantwadi	Dandeli
Maharashtra	Sindhudurg	Sawantwadi	Madura
Maharashtra	Sindhudurg	Sawantwadi	Dingne
Maharashtra	Sindhudurg	Sawantwadi	Aros
Maharashtra	Sindhudurg	Sawantwadi	Galel
Maharashtra	Sindhudurg	Sawantwadi	Kondure
Maharashtra	Sindhudurg	Sawantwadi	Satarda
Maharashtra	Sindhudurg	Sawantwadi	Dongarpal
Maharashtra	Sindhudurg	Sawantwadi	Sateli Tarf Soundal"

86. A comparison of the above villages with Annexure IX of the EIA report indicates that several of the above villages which have been mapped as ESZs in the draft notification fall within the 10 km buffer from the project site. Hence, the submission of Ms Shenoy merits a close analysis.

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- 87.** The EIA report has rested content with the observation that Pernem Taluka, where the project site is situated, is not an ESZ. That is not sufficient or adequate, since the purpose of the EIA report is to make an assessment of ESZs which fall within the study area. Mr Nadkarni's response to the above submission is that:
- 87.1.** Neither the Mopa Plateau nor Pernem Taluka constitute a part of the Western Ghats.
- 87.2.** The HLWG chaired by Dr Kasturirangan recommended a prohibition of specified activities while for other activities, the 2006 Notification was required to be followed.
- 87.3.** The EIA report, while considering the project, has also adverted to the Kasturirangan Report.
- 87.4.** Infrastructure projects except in the prohibited category are permissible, subject to an EIA.
- 88.** The report of the HLWG dated 15-4-2013 recommends that there should be a complete ban on mining, quarrying and sand mining activity in the ESZ. Similarly, it recommends that no thermal power project should be allowed in ESZs and that all "red category" industries should be strictly banned. Building and construction projects of 20,000 sq m and above should not be allowed. However, all other infrastructure and development projects, which have been recommended, should be subject to the grant of ECs under Category "A" projects of the 2006 Notification.
- 89.** The Union Government issued a Notification on 13-11-2013 in pursuance of Section 5 of the Environment (Protection) Act, 1986 to the effect that from the date of the issuance of those directions, no pending case or fresh case shall be considered by EACs/MoEF or SEACs/SEIAAs covering the following industries:
- (a) Mining, quarrying and sand mining;
 - (b) Thermal power plants;
 - (c) Building and construction projects of 20,000 sq m area and above;
 - (d) Township and area development projects with an area of 50 ha and above and/or with a built-up area of 1,50,000 sq m and above; and
 - (e) "Red category" industries.
- 90.** The submission of the ASG is that there is no prohibition on setting up a Category "A" project in an ESZ. An infrastructure project such as an airport does not fall within the range of prohibited activities. What is necessary is that the project must be assessed in terms of the 2006 Notification.
- 91.** The glaring deficiency which emerges from the EIA report is its failure to notice the existence of ESZs within a buffer distance of 10 km of the project site. On one hand, the EIA report takes note of the HLWG report dated 15-4-2013. But, on the other hand, the EIA report ignores the existence of ESZs within the study area on the ground that the *project site* is not situated in an ESZ. That, as we have seen, can never be accepted as an adequate

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response. The purpose and object of the EIA report is to map areas, understand their vulnerabilities, and conduct a study on a scientific basis of the impact of the proposed project on an ecologically sensitive terrain. The EIA report fails to meet a classical requirement of administrative law: to take into account a relevant consideration, namely, that within the study area which has to be considered, there is the presence of ESZs.

92. In deducing the impact of a proposed activity on an ESZ, it is not sufficient to take recourse to a generic assessment of a proposed activity on the ecology of the study area. The EIA report must factor in those specific features which make an area ecologically sensitive. These would encompass all aspects of environmental concern which render the area ecologically sensitive. This would include wetlands, water sources, water bodies, coastal zones, biospheres, mountains and forests. The vulnerabilities of each of them must be studied as distinctive components together with a holistic analysis of their existence in a chain of biodiversity. Where an area is ecologically sensitive because of the presence of flora or fauna requiring protection, that must be specifically adverted to and studied. The deficiency of the EIA report emanates from its failure to notice that the purpose of the study was not only to determine whether the project site is ecologically sensitive. Confining itself to this aspect, the EIA report failed to consider a crucial and relevant consideration.

F. Sampling points

93. The submission of the appellants is that the Guidance Manual requires the collection of primary data through measures and field studies in the study area within 10 km radius from the ARP. Secondary data has to be collected within a 15 km aerial distance for the parameters mentioned in Column 9(III) of Form 1 of the 2006 Notification. In the present case, it was urged that not a single sampling station with reference to any of the parameters is situated in Maharashtra. As a result, no sampling sites for any of the parameters fall within 40% of the study area. Consequently, no primary data collection was done despite the carrying out of two samples in 2011 and 2014 respectively. In response to this submission, it has been urged that all sampling points were based on Para 4.1 of the Guidance Manual. As a result, it was submitted that areas within Goa and Maharashtra were studied along with impact studies. In order to assess the submission, it is necessary to refer to relevant aspects of the EIA report:

F.1. Air quality

94. In order to study the ambient air quality in terms of suspended particulate matter, respirable particulate matter, SO₂, NO_x, CO and HC, ambient air quality monitoring stations were set up at six locations. They are at Sinechaadvin, Katwal, Mopa Village, Pernem, Nagzor and Patradevi. All are in Goa. The location at Patradevi was on the border shared by Goa with Maharashtra. The study area extended to a radial distance of 10 km from the ARP. We accept the submission of the ASG that they would hence cover areas falling within both Goa and Maharashtra. Para 4.1.2 of Chapter IV of the EIA

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- a report sets out the baseline data collected at the monitoring stations. Since the entire study area within a radius of 10 km was considered for monitoring air quality, we accept the submission that the location of the sampling points within Goa did not preclude the monitoring of air quality within the study area.

F.2. Water quality

- b 95. Para 4.2 of the EIA report states that groundwater quality was measured at four locations: Mopa Village, Pernem, Dargal and Patradevi marked within 10 km of the study area. The surface water quality was measured at three locations: Chapora River, Tiraikol River and Nala near Mopa Village within 10 km of the study area. The impact assessment is contained in the EIA report. The Mopa Plateau is at a height of 155 metres above mean sea level and water from the plateau flows down to the rivers in the State of Goa. The laterite plateau is an important source of drainage by providing natural channels for water. The impact of a greenfield airport on the closing of natural channels which feed the water bodies has not been scientifically mapped or studied.

F.3. Noise quality

- d 96. While monitoring the noise quality, the EIA report covered a radius of 10 km. In order to obtain baseline data of noise quality, nine monitoring stations were chosen in the study area. While it is true that all nine locations were situated in the State of Goa, one (Patradevi) was situated on the border shared between Goa and Maharashtra. The EIA report contains an impact study and the study area covered includes both the States.

F.4. Flora and fauna

- e 97. The EIA report indicates that the area surrounding the site for the proposed airport has dense forests¹⁰. These total up to nearly 6634.19 hectares¹¹. Ms Shenoy has urged that it is impossible that the fauna found by the project proponent through both primary sampling and secondary sources was only limited to animals such as: domestic dog, cat and cattle, common house mouse, rat and mongoose, jackal and the three striped palm squirrel. This, in her submission, is a clear indication that the EIA report is faulty and clearly incorrect.

f 98. While dealing with the above submissions, it is necessary to note that the Guidance Manual contains a specific reference to the collection of data of sensitive habitats and wild/endangered species in the project area. The Guidance Manual stipulates thus:

- g “Data on sensitive habitats, wild or endangered species in the project area also is to be collected from Zoological Survey of India (ZSI), Botanical Survey of India (BSI), Wildlife Institute of India (WII) and Ministry of Earth Sciences. Wildlife symbolises the functioning efficiency of the entire ecosystem. Just as wild flora needs special treatment for preservation and

h 10 See for instance Para 2.0 of the executive summary and Para 2.3.1 of Chapter I.
11 See Para 2.3.1, Chapter II.

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growth, wild fauna as well deserves specific conservatory pursuits for posterity.”

99. The grievance is that no data has been collected from the State of Maharashtra and all secondary data collected by the project proponent related only to the State of Goa. There is substance in the submission which has been urged on behalf of the appellant. A reading of the counter-affidavit filed by the State of Goa would seem to support the appellant’s submission. It is stated: a

“I say that several recognised publications and research papers were referred to in order to verify and assess the data collected, to name a few of the publications: b

(i) *Birds of Goa* by Heinz Lainer & Rahul Alvares;

(ii) *The Goan Jungle Book* by Nirmal Kulkarni;

(iii) *A Photographic Guide to Butterflies of Goa* by Parag Ragnekar; c

(iv) *Flora of Goa, Diu, Daman, Dadra and Nagarhaveli* (Vol. 1) by R.S. Rao;

(v) *Flora of Goa, Diu, Daman, Dadra and Nagarhaveli* (Vol. 2) by R.S. Rao;

(vi) *Red Data Book* published by Botanical Survey of India; d

(vii) Study materials published in Goa ENVIS Centre were also referred.”

100. The appellant, on the other hand, has sought to rely upon several independent studies including the following: e

“(a) A rapid survey to assess mammal presence at Barazan Plateau, Mopa, Goa, India conducted by Girish Punjabi (Wildlife Biologist) and Atul S. Borker (Full Member of IUCN/SSC Otter Specialist Group) that Schedule I species such as gaur, leopard and Indian Pangolin; Schedule II species such as giant squirrel, common palm civet; Schedule III species such as sambar, wild pig and Schedule IV species such as Indian hare, Indian porcupine. f

The report also mentions the presence of the Sawantwadi — Dodamarg wildlife corridor within the 10 km proposed project site.

(b) Report on one day survey conducted to find evidence of Otter presence at Mopa, Goa conducted by Atul Borker (Full Member of IUCN/SSC Otter Specialist Group) that found that a perennial stream on the plateau had presence of the smooth coated otter, that falls within Schedule II of the Wildlife (Protection) Act, 1972. g

(c) Report on two days’ survey to find evidence of plant and bird species at Mopa Plateau conducted by Aparna Watve (Ecologist) and Sanjay Thakur (Wildlife Biologist) that found Schedule I species such as the Indian peafowl and the Dipcadi Concanese which is critically h

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endangered. The study clearly mentions that the EIA study is entire deficit as it does not accurately consider the flora and fauna of the area as well as the number of trees to be cut.”

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101. We find that the collection of both primary and secondary data of fauna in the EIA report was perfunctory. The primary study is not based on data collected from acknowledged sources such as the Zoological Survey of India, Wildlife Institute of India and Ministry of Earth Sciences as required under the Guidance Manual. Similarly, as regards avi-faunal studies, the EIA report lists 385 plant species in Table 4.15 of Chapter IV, titled “Description on Environment”. It also states that 86 species of birds were observed during the survey in the 10 km study area from the proposed site. Column 9(III) of Form 1 refers to “areas” in the following terms:

b

“areas which are used by protected, important or sensitive species of flora or fauna for breeding, foraging, nesting, resting, over wintering or migration”.

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The above column was left blank by the project proponent in Form 1. According to the Guidance Manual, secondary data has to be collected within an aerial distance of 15 km for the parameters specifically specified in Column 9(III) of Form 1 of the 2006 Notification. This was evidently not done. A careful avi-faunal study was necessary, having due regard to the fact that the proposed project is an airport site. Bearing in mind the profile of airport operations, foraging or nesting by bird species in and around the airport must not be discarded. It must be accepted that in a project involving the setting up of an airport, the EIA report must deal with the impact of the airport on birds and likewise the impact of birds on aircraft operations.

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F.5. Felling of trees

102. Para 2.1.5 of the executive summary to the EIA report deals with the biological environment. Para 2.1.5 stipulates thus:

“*The area required for proposed airport has only few trees, mainly bushes. These will be cleared during site preparation.*” (emphasis supplied)

f

103. Similarly, Chapter II which deals with project description specifies in Para 2.3.1 that “*vegetation and trees are sparse at the site*”. That the trees which were required to be felled were far from “few” is evident from the reply filed by the State of Goa in the present proceedings where it has been stated that permissions were granted for the *felling of 54,676 trees*. The EIA report ignored them. The submission in the EIA report that there were only sparse trees is sought to be explained by the State from the perspective of the large area of the land proposed for the project. It is sought to be explained that since the total area is 2133 ac, the number of trees would proportionately work out to about 25 trees in an area of one acre (about one tree in an area of 160 sq m).

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104. In terms of the order passed by the Bombay High Court in the PIL, to which we have adverted earlier, the Principal Chief Conservator of Forests, Goa passed an order on 2-4-2018 providing for: a

104.1. The enumeration of all trees.

104.2. Exploring the possibility of transplanting existing trees which could be safely transplanted into ground areas.

104.3. Issuance of tree cutting permission by the Deputy Conservator of Forests. b

104.4. Planting of ten times the number of trees felled by the concessionaire under the supervision of the Forest Department. c

105. On 6-2-2018, the Deputy Conservator of Forests had granted permission for felling of 21,703 trees. Following the dismissal of an appeal under Section 15 of the Goa, Daman and Diu Preservation of Trees Act, 1984 filed by the Federation of Rainbow Warriors, a writ petition was filed before the Bombay High Court (WP No. 1 of 2018). The High Court set aside⁴ the order of the Deputy Conservator of Forests and remanded the proceedings to the Principal Chief Conservator who passed the order which has been noted above. Following the order of the Principal Chief Conservator, 54,676 trees were enumerated. The competent authority granted permission for the felling of trees thereafter on the following dates: d

(i) 1422 trees by an order dated 20-4-2018;

(ii) 18,408 trees by an order dated 24-7-2018; and

(iii) 33,298 trees by an order dated 1-10-2018.

Following this exercise, the felling of trees was completed on 18-1-2019. The Bombay High Court having directed that the order of the Principal Chief Conservator of Forests shall be subject to the specific permission of NGT in the pending proceedings, a miscellaneous application was moved before NGT. While disposing of the main appeal, NGT also disposed of the miscellaneous application and under the head of “Biological Environment”, the following directions have been issued: e

“E. *Biological environment*” f

1. Efforts be made to transplant the trees to other locations in the same vicinity by using appropriate mechanical devices which are available these days.

2. Efforts be made to plant indigenous species which are tall in size rather than small saplings. g

3. Concerns have been raised by the appellants with regard to plant species “Dipcadi Concanense” which has been claimed to be a threatened plant. This claim of the appellants has been negated by the respondent by producing a documentation of Botanical Survey of India, Western Regional Centre, Pune, Maharashtra titled as “A h

⁴ *Federation of Rainbow Warriors v. Conservator of Forests*, 2018 SCC OnLine Bom 329 : (2018) 3 Mah LJ 424

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a Note on Occurrence and Distribution of Dipcadi Concanense”. By invoking precautionary principle, we direct the project proponent to draw up a conservancy by plan/scheme for “Dipcadi Concanense” in collaboration with Forest Department, State of Goa and Botanical Survey of India and ensure its implementation.”

b **106.** We express our serious displeasure with the manner in which the EIA report made an attempt to gloss over the existence of trees. The EIA report prevaricated by recording that the area required for the proposed airport has only a few trees, mostly bushes. The EIA report states that vegetation and trees are sparse at the site. A photograph and a google map image are put forth as illustrations in Figure 2.3 of Chapter II. To realise later that the project involved the felling of 54,676 trees is indicative of the cavalier approach to the issue and a process of fact finding which is parsimonious with the truth. Post facto explanations are inadequate to deal with a failure of due process in the field of environmental governance. The State of Goa would have us gloss over the felling of trees by submitting that 54,676 trees over a project area of 2133 ac averages out to 25 trees per acre or one tree over an area of 160 sq m. This is a fallacious approach to the issue. Mathematical averages cannot displace factual data about the actual number of trees which were affected by the project. The EIA report ought to have scrutinised the number of trees, their nature and longevity. Issues such as the extent to which the trees or some of them were capable of being transplanted had to be considered in the EIA report. The location of the trees is also significant. In a given case, if the trees appear in clusters or in a dense formation in segments of the project site, it would be necessary to determine whether felling all of them was necessary for the project to be implemented.

e **107.** In the written submissions which have been filed by the State of Goa, it has been submitted that of the 54,676 trees which were felled:

- (i) 32,193 trees representing 59% had a girth of 30 to 50 cm;
- (ii) 19,903 trees representing 36% had a girth of 50 to 100 cm; and
- (iii) “only 2580 trees” had a girth exceeding 100 cm.

f **108.** The Goa, Daman and Diu Preservation of Trees Act, 1984 defines the expression “tree” in Section 2(j) in the following terms:

g **“2. (j) “tree”** means any woody plant whose branches spring from and are supported upon the trunk or the body and whose trunk or body is not less than ten centimetres in diameter at a height of one meter from the ground level and includes coconut palm.”

h This definition has been highlighted to indicate that it incorporates a stringent meaning of the expression “trees”. The point, however, is simple: there was a glaring omission of the factual existence of as many as 54,676 trees in the EIA report. For project proponents, the environment may not possess a human voice. But the purpose of prescribing an EIA report is precisely to undertake a baseline study on all aspects of the environment and to anticipate the impact of a projected activity on the environment. Ignoring *any* component of the

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environment amounts to a serious dereliction of duty which detracts from the rule of law in matters of environmental governance.

109. The order of the Principal Chief Conservator of Forests mandating transplantation, where possible, and the plantation of ten trees for every tree felled provides a measure of rectification. But there is a reason why issues pertaining to vegetational cover must be taken seriously in the EIA process. The formula of planting a set number of trees for every existing tree felled must be alive to the fact that the survival of new plantations is replete with uncertainty. The survival of transplanted trees is equally a matter of uncertainty. Though the development of infrastructure may necessitate the felling of trees, the process stipulated under the 2006 Notification must be transparent, candid and robust. A regulatory regime for environmental governance is based on the hypothesis that all stakeholders will act with rectitude. Hiding significant components of the environment from scrutiny is not an acceptable modality to secure project approvals. There was a serious lacuna in regard to disclosures and appraisal on this aspect of the controversy.

G. Public consultation

110. The importance of public consultation is underscored by the 2006 Notification. Public consultation, as it states, is “the process by which the concerns of local affected persons and others who have a plausible stake in the environmental impacts of the project or activity are ascertained with a view to take into account all the material concerns in the project or activity design as appropriate”. This postulates two elements. They have both, an intrinsic and an instrumental character. The intrinsic character of public consultation is that there is a value in seeking the views of those in the local area as well as beyond, who have a plausible stake in the project or activity. Public consultation is a process which is designed to hear the voices of those communities which would be affected by the activity. They may be affected in terms of the air which they breathe, the water which they drink or use to irrigate their lands, the disruption of local habitats, and the denudation of environmental ecosystems which define their existence and sustain their livelihoods.

111. Public consultation involves a process of confidence building by giving an important role to those who have a plausible stake. It also recognises that apart from the knowledge which is provided by science and technology, local communities have an innate knowledge of the environment. The knowledge of local communities is transmitted by aural and visual traditions through generations. By recognising that they are significant stakeholders, the consultation process seeks to preserve participation as an important facet of governance based on the rule of law. Participation protects the intrinsic value of inclusion.

112. The 2006 Notification postulates:

112.1. A public hearing at or in close proximity to the project site to ascertain the views of “locally affected persons”.

112.2. Obtaining written responses from “other concerned” individuals having a “plausible stake” in the environmental aspects of the project or the activity.

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112.3. The duty of SPCB to conduct hearings and to forward the proceedings to the regulatory authority within the stipulated time.

- a* **112.4.** Placing on the website of the Pollution Control Board a summary of the EIA report in the prescribed format and the making available of the draft EIA report by the regulatory authority on a written request by any person concerned, for inspection.

112.5. The duty of the applicant to address all material concerns expressed during the process of public consultation.

- b* **112.6.** The making of appropriate changes in the draft EIA and EMP.

112.7. The submission of the final EIA report by the applicant to the regulatory authority for appraisal.

- c* **112.8.** Each of these features is crucial to the success of a public consultation process. Public consultation cannot be reduced to a mere incantation or a procedural formality which has to be completed to move on to the next stage. Underlying public consultation is the important constitutional value that decisions which affect the lives of individuals must, in a system of democratic governance, factor in their concerns which have been expressed after obtaining full knowledge of a project and its potential environmental effects.

- d* **113.** Apart from the intrinsic value of public consultation, it serves an instrumental function as well. The purpose of ascertaining the views of stakeholders, is to account for all the material concerns in the design of the proposed project or activity. For this reason, the process of public consultation involves several important stages. The Pollution Control Board is under a mandate to forward the proceedings to the regulatory authority. The project proponent must address all material environmental concerns and make appropriate changes in the draft EIA and EMP. The project proponent may even submit a supplementary report to the draft EIA. Each of these elements is crucial to the design features of the 2006 Notification. A breach will render the process vulnerable to challenge on the ground that:

- f* (i) significant environmental concerns have not been taken into account;

(ii) there was an absence of a full disclosure when the EIA report was put up for consultation; and

(iii) concerns which have been expressed by persons affected by the project have not been adequately dealt with or analysed.

- g* **114.** The public consultation was held on 1-2-2015 at Mopa. Nearly 70 persons spoke on the occasion and 1586 persons signed the attendance sheet. 1150 representations were received. Some of the environmental concerns expressed during the public hearing are catalogued below:

114.1. Mopa Plateau has multiple watersheds and the discharge of water goes down to the rivers.

- h* **114.2.** Nearly forty springs would be affected along with flora and fauna.

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114.3. The public hearing had been conducted in an area where the land was barren and with no plantation.

114.4 The impact on River Chapora, which is within a 10 km radius from the project, has not been adequately analysed. a

114.5. Mopa Plateau has a natural mechanism for groundwater recharge.

114.6. Protection of the Western Ghats is necessary, particularly with the view to not disturb flora and fauna.

114.7. The EIA report has not been made available to the affected areas and Gram Panchayats in the buffer zone. b

114.8. Local plantations would be affected.

114.9. The number of trees to be felled by the project proponent has not been specified in the EIA report.

114.10. The Dodamarg Wildlife Sanctuary had been “sanitised” by the High Court. c

114.11. Forest clearance had not been obtained.

114.12. The sacred groves of the area have not been described, including the Barazan which will be lost.

114.13. The slopes sustain cashew plantations with nearly forty lakh cashew trees resulting in an annual income of rupees fifty crores. d

114.14. No study has been carried out in the 10 km radius falling in Maharashtra.

115. These concerns are at the forefront of the debate in the present case. What is significant, is the manner in which they were projected before EAC at its 149th meeting on 26-6-2015 where the project proponent made a presentation. The minutes of the meeting recorded the following observations of the project proponent: e

“(x) Public hearing was conducted on 1-2-2015 at Simechen Adven, Mopa, Goa. *The major issues raised during public hearing and responses sought from the project proponent related to employment opportunities.*” (emphasis supplied) f

On the basis of a factual analysis, Ms Shenoy has submitted that only seven out of the 68 objections dealt with the issue of employment. Evidently, the project proponent failed to address the other significant concerns in the manner which is required by the 2006 Notification.

116. In *Utkarsh Mandal v. Union of India*¹², the Delhi High Court has succinctly summarised the duty of EAC to apply its mind to the objections raised in the course of public hearings: (SCC OnLine Del para 40) g

“40. ... It is that body that has to apply its collective mind to the objections and not merely MoEF which has to consider such objections at the second stage. We therefore hold that in the context of the EIA Notification dated 14-9-2006 and the mandatory requirement of holding h

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a public hearings to invite objections it is the duty of EAC, to whom the task of evaluating such objections has been delegated, to indicate in its decision the fact that such objections, and the response thereto of the project proponent, were considered and the reasons why any or all of such objections were accepted or negated. The failure to give such reasons would render the decision vulnerable to attack on the ground of being vitiated due to non-application of mind to relevant materials and therefore arbitrary.”

b **117.** Crucial objections and environmental concerns which were raised during the consultative process were reduced to a single issue by the project proponent before EAC: the need for employment opportunities. The project proponent failed in its duty to inform EAC. The record does not indicate a critical appraisal or analysis by EAC. EAC was duty-bound to apply its mind to the environmental concerns raised by stakeholders. The duty of the project

c proponent to place fairly all the environmental concerns raised during the public hearing is the crucial link in the appraisal by EAC. The minutes of the meeting indicate that there was no fair and complete disclosure of the objections which were raised during the public hearing before EAC. There is evidently a failure in the process of applying and implementing the norms laid down in the 2006 Notification in this regard.

d **H. Appraisal by EAC**

e **118.** Appraisal by EAC is structured and defined by the 2006 Notification. The process of appraisal is defined to mean “a detailed scrutiny” by EAC of the application and other documents like EIA report and the outcome of the public consultation, including the public hearing proceedings, submitted by the applicant to the regulatory authority for the grant of an EC. EAC is under a mandate to conduct the process of appraisal in “a transparent manner”. On the conclusion of these proceedings, EAC has to make “categorical recommendations” to the regulatory authority either for:

- f* (i) the grant of a prior environmental clearance on stipulated terms and conditions; or
- (ii) the rejection of the application.

The recommendations made by EAC to the regulatory authority must be based on “reasons”.

g **119.** EAC, at its 149th meeting held on 26-6-2015, considered the EIA report and sought a clarification from the project proponent on the following six aspects:

- “(i) There is a need to superimpose the layout plan showing the drainage pattern including natural drainage, construction in the area on superimposed map showing clear topography of the region;
- (ii) 10 year data regarding rainfall in the area;

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(iii) Justification on sustainability of existing traffic and transportation arrangements especially at intersection points of the approach road to the airport needs to be submitted;

a

(iv) A traffic circulation plan needs to be evolved for smooth running of traffic in the area;

(v) Measures taken to comply with the CPCB guidelines formulated for noise pollution control in airport areas to be submitted; and

(vi) Minimum 20% energy conservation measures should be adopted incorporating provisions for use of LED, star-rated ACs, etc. Revised Energy Conservation Plan to be submitted.”

b

120. A representation was received from the Federation of Rainbow Warriors, consequent to which the consideration was deferred and the project proponent was requested to submit a “pointwise reply to the issues raised” in the representation. EAC, at its 152nd meeting held on 20-10-2015, observed that the project proponent had provided “pointwise clarifications to the concerns raised by the ‘NGO’”. EAC noted thus:

c

“(i) The EIA report has been updated by the PP after taking into account the issues raised in the public hearing and the same has been put in public domain.

(ii) The project is outside the ESZ delineated by the Dr Kasturirangan Committee and TERI.

d

(iii) The project envisages construction of rainwater harvesting pits within the plot area, which would contribute to groundwater recharge. Hence, the objection of NGO in this regard does not hold.

(iv) The biological data in respect of flora and fauna was collected by the functional area experts of M/s Engineers India Ltd. and not by M/s Pragati Labs stationed at Goa during November 2014 to January 2015 for collection of ambient air quality, noise, water quality, soil, socioeconomics.”

e

121. Following the above statement, EAC recommended the grant of an EC subject to certain conditions. Para 3.1.2 of the minutes of EAC is as follows:

f

“The Committee noted the peculiar circumstances of the case and the difficulties in land acquisition which led to delay in preparation of the EIA report, and the larger public interest involved.

Keeping in view the fact that the project proponent has not concealed facts and circumstances of the case and the project is in the public interest, the Ministry may take an appropriate view on the objection that the public hearing could not have been held, in the absence of valid ToR, though the validity has been extended twice and regularised subsequently. The Committee also noted that the public hearing was attended by about 3000 people and hence, there is substantive and active public participation as required under the law for public consultation.

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The PP further provided their reply to the rebuttal by the said NGO on various issues.

a EAC, after deliberations, recommended the project for grant of EC subject to the above and the following:

(i) The project proponent shall ensure availability of adequate land at the junction of Mopa Airport Road and Mumbai/Goa NH 17 for traffic circulation/management and to provide for all the traffic interchanges and proposed cover.

b (ii) The approach and exit roads to the airport would be approved from the NHAI and should be according to IRC norms.

(iii) A perusal of the topo sheet superimposed on the runway area indicates that the extreme end of the runway is covering the drainage area partly. The drainage area which is under the runway needs to be channelised. The area between the parallel taxi way and runway needs to be handled carefully to drain the water from the area in the outfall.”

c 122. The above explanation must be assessed with reference to the norm that EAC is required to submit reasons for its recommendation. The above extract indicates that EAC has adverted to the following circumstances:

d 122.1. The “peculiar circumstances” of the case.

122.2. The difficulties in land acquisition which led to a delay in the preparation of the EIA report.

122.3. The “larger public interest” involved.

122.4. The project proponent had not concealed facts and circumstances of the case.

e 122.5. The project is in the public interest.

122.6. The project proponent had provided a reply to the rebuttal by Rainbow Warriors on various issues.

f 123. This analysis of the EIA report is, to say the least, sketchy and perfunctory and discloses an abdication of its functions by EAC. The requirement that EAC must record reasons, besides being mandatory under the 2006 Notification, is of significance for two reasons:

g 123.1. EAC makes a recommendation to the regulatory authority in terms of the 2006 Notification. The regulatory authority has to consider the recommendation and convey its decision to the project proponent. The regulatory authority, as Para 8(ii) provides, shall normally accept the recommendations of EAC. Where it disagrees, it would request reconsideration, stating the reasons for its disagreement. In turn, EAC will consider the observations of the regulatory authority and furnish its views within a stipulated period.

h 123.2. The grant of an EC is subject to an appeal before NGT under Section 16 of the NGT Act, 2010.

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124. The reasons furnished by EAC for its recommendation are a basic link in the ultimate decision of the regulatory authority. They constitute substantive material which will be considered by the Tribunal when it considers a challenge to the grant of an EC. a

125. What, then, do the reasons which have been furnished by EAC tell us? EAC relies on the “peculiar circumstances of the case” as the basis of its recommendation. What the peculiar circumstances are, is left for pure guesswork or surmise. EAC refers to the delay in acquisition proceedings, a larger public interest and the fact that the project proponent “has not concealed facts and circumstances”. Each one of the reasons which has weighed with EAC betrays a lack of comprehension of the true nature of its function under the 2006 Notification. EAC has failed to consider relevant circumstances bearing on the environmental impact of the project and has instead considered circumstances extraneous to its function. That the project proponent, according to EAC, has not concealed facts and circumstances is not reason enough to warrant a grant of an EC. Moreover, even this hypothesis (as we have seen earlier) is incorrect. There is no analysis of the EIA report. EAC has failed to answer to the call to its expertise. b
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126. Clause (vi) of Para 8 of the 2006 Notification stipulates thus:

“(vi) Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection, and cancellation of prior environmental clearance granted on that basis. Rejection of an application or cancellation of a prior environmental clearance already granted, on such ground, shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice.” d
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Deliberate concealment or the submission of false or misleading information or data material for screening, scoping, appraisal or decision on the application makes it liable for rejection. That the project proponent must submit all information and data without concealing relevant features is a basic hypothesis and expectation of the 2006 Notification. EAC has, in the brief reasons which are contained in Para 3.1.2, not applied its mind at all to the environmental concerns raised in relation to the project nor do its reasons indicate an appraisal of those concerns by evaluating the impact of the project. f

127. EAC is an expert body. It must speak in the manner of an expert. Its remit is to apply itself to every relevant aspect of the project bearing upon the environment. It is not bound by the analysis which is conducted in the EIA report. It is duty-bound to analyse the EIA report. Where it finds it deficient it can adopt such modalities which, in its expert decision-making capacity, are required. The reasons which are furnished by EAC constitute a live link between its processes and the outcome of its adjudicatory function. In the absence of cogent reasons, the process by its very nature, together with the outcome stands vitiated. g
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- 128.** Mr A.N.S. Nadkarni, learned ASG, urged that EAC had, in its 149th meeting, sought additional information on six issues. Subsequently, at its
- a 151st meeting, it deferred consideration upon the representation filed by the Federation of Rainbow Warriors and at its 152nd meeting, it analysed the response of the project proponent to the representation. Hence, EAC must be deemed to have applied its mind. This approach is completely flawed. At its 149th meeting, EAC specifically called for a clarification on six issues. The next meeting was deferred. The minutes of the 152nd meeting contain
- b no assessment of whether the clarifications which were sought by EAC had been replied to its satisfaction by the project proponent. The objection to the modalities adopted by EAC, however, are more fundamental. The minutes of the 152nd meeting indicate that EAC primarily, if not exclusively, dealt with the “pointwise clarifications” of the project proponent to the representation by the Federation of Rainbow Warriors. Dealing with a representation is not
- c exhaustive of the function of EAC. Arguably, if no representation was received, or if a representation submitted by an individual objector is found to be incorrect, that by itself is no ground to recommend an EC.

- 129.** EAC, as an expert body, has to scrutinise all relevant aspects of the project or activity proposed, including its impact on the environment. In taking
- d that decision, the EIA report is an input for its analysis. The scrutiny and appraisal has to be undertaken by EAC as an expert body and its reasons must reflect that this has been done. As the minutes indicate, the non-application of mind by EAC is evident with reference to the presence of 15 ESZs in the study area. EAC notes that the project is outside the ESZ delineated by the Kasturirangan Committee. In the absence of a critical analysis, EAC failed in
- e discharging its duties under the 2006 Notification. The recommendations of EAC furnish a guide for MoEFCC. Indeed, the 2006 Notification stipulates that the recommendations of EAC would normally be accepted. Consequently, a failure of due process before EAC, as in the present case, must lead to the invalidation of EC.

I. The appellate jurisdiction of NGT: the requirement of a merits review

130. NGT is entrusted with appellate jurisdiction under Section 16 of the NGT Act, 2010. Section 16(h) provides thus:

“**16. Tribunal to have appellate jurisdiction.**—Any person aggrieved by—

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(h) an order made, on or after the commencement of the National Green Tribunal Act, 2010, granting environmental clearance in the area in which any industries, operations or processes or class of industries, operations and processes shall not be carried out or shall be carried out subject to certain safeguards under the Environment (Protection) Act, 1986 (29 of 1986);”

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131. Section 20 mandates that the Tribunal shall, while passing any order, decision or award, apply the principles of sustainable development, the precautionary principle and the polluter pays principle. Several decisions of this Court have given meaning to these principles¹³.

132. The decision of NGT indicates that several significant submissions were urged before it. The entire analysis by NGT is contained in one paragraph of its judgment dated 21-8-2018¹ which is extracted below: (*Federation of Rainbow Warriors case*¹, SCC OnLine NGT para 27)

“27. We find that the Expert Appraisal Committee had before it pointwise reply of the project proponent which we have already quoted above. Therein delay in land acquisition process and collection of fresh baseline data are mentioned. It is also mentioned that data for Maharashtra was also considered. Other issues duly explained are hydro-geological features and data with regard to flora and fauna, socioeconomic profile, topography, vegetation, observance of due procedure in public hearing, relevance of study with regard to ecosensitive areas of Western Ghats, feasibility of proposed airport in terms of cost benefit analysis as well as environmental cost benefit analysis. EAC also considered the data compiled by various offices. Mere fact that different opinions have been expressed by other experts is not enough to hold that EAC did not apply its mind. The rehabilitation programme was also produced before EAC.”

The next paragraph contains a brief reference to the fact that the requirement of a study over a distance of 15 km is in regard to the collection of secondary data. The above paragraph, in our view, does not fulfil the requirement of a merits review by an expert adjudicatory body vested with appellate jurisdiction.

133. The NGT Act provides for the constitution of a tribunal consisting both of judicial and expert members. The mix of judicial and technical members envisaged by the statute is for the reason that the Tribunal is called upon to consider questions which involve the application and assessment of science and its interface with the environment. In order to be eligible for appointment as an expert member, a person must fulfil the following qualifications prescribed in Section 5(2):

“5. (2) A person shall not be qualified for appointment as an Expert Member, unless he—

(a) has a degree in Master of Science (in physical sciences or life sciences) with a Doctorate degree or Master of Engineering or Master of Technology and has an experience of fifteen years in the relevant field including five year’s practical experience in the field of environment and

¹³ *Vellore Citizens’ Welfare Forum v. Union of India*, (1996) 5 SCC 647; *M.C. Mehta v. Kamal Nath*, (1997) 1 SCC 388; *M.C. Mehta v. Union of India*, (1997) 2 SCC 353; *A.P. Pollution Control Board v. M.V. Nayudu*, (1999) 2 SCC 718; *Narmada Bachao Andolan v. Union of India*, (2000) 10 SCC 664; *Indian Council for Enviro-Legal Action v. Union of India*, (2011) 8 SCC 161 : (2011) 4 SCC (Civ) 87

¹ *Federation of Rainbow Warriors v. Union of India*, 2018 SCC OnLine NGT 831

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a forests (including pollution control, hazardous substance management, environment impact assessment, climate change management, biological diversity management and forest conservation) in a reputed National level institution; or

(b) has administrative experience of fifteen years including experience of five years in dealing with environmental matters in the Central or a State Government or in a reputed National or State level institution.”

134. NGT is an expert adjudicatory body on the environment.

b 135. In two of its previous decisions, NGT has shown the path along with which it must traverse in arriving at its decisions:

135.1. In *Save Mon Region Federation v. Union of India*¹⁴, the grant of an EC to a 780 MW Hydroelectric Project in Tawang District of Arunachal Pradesh was challenged. NGT framed the question before it in broad terms:

c “... the material issue, therefore, that needs to be answered in the present appeal is as to whether the process of grant of prior EC to the project in question suffers from vice of faulty scoping process or not.”

d Having reviewed the information furnished in Form 1 by the project proponent as well as the multiple reports on record on the bird species involved in the site for the proposed project, NGT held that facts material to the case were not present before EAC and the consequent “vacuum in the EIA report” led to aberrations in the appraisal process conducted by it. Suspending EC granted to the project, NGT accepted the contention which was urged before it that NGT has the “authority to take an appropriate decision on the facts placed before it” and “set aside or suspend EC”.

e 135.2. Similarly, in *Sreeranganathan K.P. v. Union of India*¹⁵, the grant of an EC to the KGS Aranmula International Airport Project was challenged. NGT found fault with the process leading to up to the grant of EC since sector-specific issues had not been dealt with. NGT extensively reviewed the information submitted by the project proponent in Form 1, the deficiencies in the EIA report, the process of appraisal conducted by EAC and the sector-specific guidelines laid down with regard to the constructions of airports and held thus: (SCC OnLine NGT paras 182 & 187)

g “182. ... a duty is cast upon EAC or SEAC, as the case may be, to apply the cardinal principle of sustainable development and principle of precaution while screening, scoping, and appraisal of the projects or activities. While so, it is evident in the instant case that EAC has miserably failed in the performance of its duty not only as mandated by the EIA Notification, 2006, but has also disappointed the legal expectations from the same. For a huge project as the one in the instant case, the consideration for approval has been done in such a cursory and arbitrary manner without taking note of the implication and importance of environmental issues. ... Thus, EAC has not conducted itself as mandated by the EIA Notification,

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14 (2013) 1 All India NGT Reporter 1
15 2014 SCC OnLine NGT 15

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2006 since it has not made proper appraisal by considering the available materials and objections in order to make proper evaluation of the project before making a recommendation for grant of EC.

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187. ... the Tribunal is of the considered opinion that there is no option but to scrap the impugned EC granted by MoEF to the 3rd respondent/project proponent for setting up the Aranmula airport.”

136. The failure to consider materials on a vital issue and indeed the non-consideration of vital issues raises a substantial question of law leading to the invoking of the jurisdiction of this Court under Section 22 of the NGT Act, 2010. The failure of process in the present case has been compounded by the absence of a merits review by NGT.

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137. The learned ASG has placed reliance on the decision of this Court in *Lafarge Umiam Mining (P) Ltd. v. Union of India*¹⁶ (*Lafarge*) to contend that the failure to disclose the presence of trees should not lead to the invalidation of EC. In that case, an application was made under the 1994 Notification for the grant of an EC to a proposed limestone mining project at Nongtra Village, East Khasi Hills District, Meghalaya. EC was granted for the project in 2001. Pursuant to a letter by the Principal Chief Conservator of Forests to MoEF drawing attention to the non-disclosure of forests, the project proponent applied for a revised EC and forest clearance under the Forest (Conservation) Act, 1980. An ex post facto EC along with forest clearance was granted in 2010. Challenging the grant of EC, it was urged that there was a failing on part of the project proponent to disclose the presence of forests on the proposed project site.

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138. A three-Judge Bench of this Court rejected the challenge and upheld the grant of EC to the proposed project. This Court relied, among other factors, on the following:

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138.1. The mining of limestone in Khasi Hills dates back to 1763 and is an integral part of the culture of Nongtra Village.

138.2. The site was cleared after thorough consultation with the custodian of the land, who decided to lease the land for the mining project following the loss of revenue caused due to mining by the unorganised sector.

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138.3. The Headman of Nongtra and Village Durbar, who participated at the public hearing and filed written submissions before this Court, supported the project and certified that no damage would be caused to adjacent lands.

138.4. At the stage of site clearance, MoEF had before it certificates by the Executive Committee, Khasi Hills Autonomous District Council and the DFO, Khasi Hill Division, Shillong, certifying that there were no forests in the proposed project site.

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138.5. The DFO certified that the proposed mining site was not a forest as defined in *Godavarman*⁶.

138.6. The 2006 Notification was not applicable.

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¹⁶ (2011) 7 SCC 338

⁶ *T.N. Godavarman Thirumulpad v. Union of India*, (1997) 2 SCC 267

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138.7. MoEF had, at multiple stages, sought clarifications from the project proponent and had undertaken requisite care and caution to protect the environment.

139. Upholding the grant of EC and the forest clearance, this Court held thus: (*Lafarge case*¹⁶, SCC p. 380, para 120)

“120. ... The word “development” is a relative term. One cannot assume that the tribals are not aware of principles of conservation of forest. In the present case, we are satisfied that limestone mining has been going on for centuries in the area and that it is an activity which is intertwined with the culture and the unique landholding and tenure system of Nongtrai Village. On the facts of this case, we are satisfied with the due diligence exercise undertaken by MoEF in the matter of forest diversion. Thus, our order herein is confined to the facts of this case.” (emphasis supplied)

140. The decision of this Court in *Lafarge*¹⁶, was based on the facts summarised above. Significantly, the standard of judicial review which must be applied in cases relating to the environment has been formulated by the three-Judge Bench in *Lafarge*¹⁶. S.H. Kapadia, C.J. noted that the doctrine of proportionality must be applied to matters concerning the environment as part of judicial review. The principles of judicial review in environmental matters have been enunciated thus: (SCC p. 380, para 119)

“119. ... In the circumstances, barring exceptions, decisions relating to utilisation of natural resources have to be tested on the anvil of the well-recognised principles of judicial review. Have all the relevant factors been taken into account? Have any extraneous factors influenced the decision? Is the decision strictly in accordance with the legislative policy underlying the law (if any) that governs the field? Is the decision consistent with the principles of sustainable development in the sense that has the decision-maker taken into account the said principle and, on the basis of relevant considerations, arrived at a balanced decision? Thus, the Court should review the decision-making process to ensure that the decision of MoEF is fair and fully informed, based on the correct principles, and free from any bias or restraint.”

141. In a recent three-Judge Bench decision of this Court in *Mantri Techzone (P) Ltd. v. Forward Foundation*¹⁷, this Court had the occasion to construe the provisions of Section 22 of the NGT Act, 2010. Speaking for the Bench, Abdul Nazeer, J. held that the test to determine whether a substantial question of law arises (within the meaning of Section 100 CPC) was formulated in the decision of a Constitution Bench in *Chunilal V. Mehta and Sons Ltd. v. Century Spg. and Mfg. Co. Ltd.*¹⁸, where it was held thus: (AIR p. 1318, para 6)

“6. ... The proper test for determining whether a question of law raised in the case is substantial would, in our opinion, be whether it is of general

¹⁶ *Lafarge Umiam Mining (P) Ltd. v. Union of India*, (2011) 7 SCC 338

¹⁷ (2019) 18 SCC 494 : 2019 SCC OnLine SC 322

¹⁸ 1962 Supp (3) SCR 549 : AIR 1962 SC 1314

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public importance or whether it directly and substantially affects the rights of the parties and if so whether it is either an open question in the sense that it is not finally settled by this Court or by the Privy Council or by the Federal Court or is not free from difficulty or calls for discussion of alternative views. If the question is settled by the highest court or the general principles to be applied in determining the question are well settled and there is a mere question of applying those principles or that the plea raised is palpably absurd the question would not be a substantial question of law.”

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Reappreciation of the “factual matrix” has been held to be distinct from a substantial question of law. In the present case, we have indicated the basis for the invocation of the jurisdiction of this Court under Section 22. There was a failure to follow binding norms under the 2006 Notification. There were serious flaws in the decision-making process. Relevant material has been excluded from consideration and extraneous circumstances were borne in mind. EAC as an expert body abdicated its obligations to make an expert determination based on reasons. NGT as an adjudicatory body failed to exercise the jurisdiction entrusted to it under Section 16(h) read with Section 20 of the NGT Act, 2010 by merely deferring to the decision to recommend and grant an EC. The parameters in regard to the existence of substantial questions of law have hence been established in the classical or conventional sense of that expression.

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J. Environmental Rule of Law

142. Fundamental to the outcome of this case is a quest for environmental governance within a rule of law paradigm. Environmental governance is founded on the need to promote environmental sustainability as a crucial enabling factor which ensures the health of our ecosystem.

143. Since the Stockholm Conference, there has been a dramatic expansion in environmental laws and institutions across the globe. In many instances, these laws and institutions have helped to slow down or reverse environmental degradation. However, this progress is also accompanied, by a growing understanding that there is a considerable implementation gap between the requirements of environmental laws and their implementation and enforcement — both in developed and developing countries alike¹⁹. The environmental rule of law seeks to address this gap.

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144. The environmental rule of law provides an essential platform underpinning the four pillars of sustainable development — economic, social, environmental and peace¹⁹. It imbues environmental objectives with the essentials of rule of law and underpins the reform of environmental law and governance¹⁹. The environmental rule of law becomes a priority particularly when we acknowledge that the benefits of environmental rule of law extend far beyond the environmental sector. While the most direct effects are on protection of the environment, it also strengthens rule of law more broadly, supports sustainable economic and social development, protects public health,

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¹⁹ United Nations Environment Programme, First Environmental Rule of Law Report. Available at <https://wedocs.unep.org/bitstream/handle/20.500.11822/27279/Environmental_rule_of_law.pdf?sequence=1&isAllowed=y>

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a contributes to peace and security by avoiding and defusing conflict, and protects human and constitutional rights¹⁹. Similarly, the rule of law in environmental matters is indispensable “for equity in terms of the advancement of the Sustainable Development Goals (SDGs), the provision of fair access by assuring a rights-based approach, and the promotion and protection of environmental and other socioeconomic rights²⁰.”

b **145.** Amartya Sen argues for a broadening of the notion of sustainable development which is the most dominant theme of environmental literature, from a need-based standard²¹ to a standard based on freedoms²². Thus recharacterised, it encompasses the preservation, and when possible even the expansion of the substantive freedoms and capabilities of people today without compromising the capability of future generations to have similar — or more — freedoms. The intertwined concepts of environmental rule of law thus further intragenerational as well as intergenerational equity.

c **146.** Decision 27/9 which was adopted by the United Nations Environment Programme’s (UNEP’s) Governing Body at its first universal session in 2013 on “Advancing Justice, Governance and Law for Environmental Sustainability” was the first internationally negotiated document to establish the term “environmental rule of law.” It declared that “the violation of environmental law has the potential to undermine sustainable development and the implementation of agreed environmental goals and objectives at all levels and that the rule of law and good governance play an essential role in reducing such violations”. It thus urged governments and organisations to reinforce cooperation to combat non-compliance with environmental laws towards achieving sustainable development. It also called upon the Executive Director to assist with the “development and implementation of environmental rule of law with attention at all levels to mutually supporting governance features, including information disclosure, public participation, implementable and enforceable laws, and implementation and accountability mechanisms including coordination of roles as well as environmental auditing and criminal, civil and administrative enforcement with timely, impartial and independent dispute resolution”. Similarly, the first United Nations Environment Assembly in 2014 adopted Resolution 1/13, which calls upon countries “to work for the strengthening of environmental rule of law at the international, regional and national levels”.

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19 United Nations Environment Programme, First Environmental Rule of Law Report. Available at <https://wedocs.unep.org/bitstream/handle/20.500.11822/27279/Environmental_rule_of_law.pdf?sequence=1&isAllowed=y>

20 “UN Environment, Environmental Rule of Law”. Available at <<https://www.unenvironment.org/explore-topics/environmental-rights-and-governance/what-we-do/promoting-environmental-rule-law-0>>

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21 Brundtland definition of Sustainable Development

22 Amartya Sen, “Sustainable Development and Our Responsibilities”. Available at <<http://www.comitatoscientifico.org/temi%20SD/documents/SEN%20Responsibility&SD%2010.pdf>>

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147. In 2016, the First World Environmental Law Congress, co-sponsored by the International Union for Conservation of Nature and UN Environment, adopted the IUCN World Declaration on the Environmental Rule of Law²³ which outlines 13 principles for developing and implementing solutions for ecologically sustainable development:

- (i) Obligation to Protect Nature
- (ii) Right to Nature and Rights of Nature
- (iii) Right to Environment.
- (iv) Ecological Sustainability and Resilience
- (v) In Dubio Pro Natura
- (vi) Ecological Functions of Property
- (vii) Intragenerational Equity
- (viii) Intergenerational Equity
- (ix) Gender Equality
- (x) Participation of Minority and Vulnerable Groups
- (xi) Indigenous and Tribal Peoples
- (xii) Non-regression
- (xiii) Progression

148. Dhvani Mehta's doctoral thesis²⁴ explores this idea of environmental rule of law in the Indian context by analysing the functioning of the three institutions of the Government with regard to environmental law. It develops a framework to assess whether the environmental rule of law in India is being strengthened or weakened, through an analysis of the legal instruments of each of the institutions of Government—statutes, executive orders and judicial decisions. The indicators on the basis of which this is done are:

- (a) the capacity of statutes to guide behaviour (one of the organising principles of the rule of law) by clearly articulating goals or balancing competing interests;
- (b) the ability of the executive to take flexible but reasoned decisions grounded in primary legislation; and
- (c) the ability of the judiciary to apply statutory interpretation and consistent standards of judicial review to give effect to environmental rights and principles.

149. In 2015, the International Community adopted the 2030 Agenda for Sustainable Development and its 17 SDGs. These 17 goals are:

- (i) Eradication of poverty;
- (ii) Eradication of hunger;
- (iii) Good health and well-being;

²³ IUCN, "Environmental Rule of Law". Available at <<http://www.iucn.org/commissions/world-commission-environmental-law/wcel-resources/environmental-rule-law>>

²⁴ Dhvani Mehta, *The Environmental Rule of Law in India*, University of Oxford, 2017. Available at <<https://ora.ox.ac.uk/objects/uuid:730202ce-f2c4-4d2f-9575-938a728fe82a>>

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- (iv) Quality education;
- (v) Gender equality;
- a (vi) Clean water and sanitation;
- (vii) Affordable and clean energy;
- (viii) Decent work and economic growth;
- (ix) Industry, innovation and infrastructure;
- (x) Reduced inequalities;
- b (xi) Sustainable cities and communities;
- (xii) Sustainable consumption and production;
- (xiii) Climate action;
- (xiv) Protecting life below water;
- (xv) Life on land;
- c (xvi) Peace, justice and strong institutions; and
- (xvii) Partnerships to achieve the goals.

150. Each of these goals has a vital connection to the others. Together, they provide an agenda for human development: development in a manner which accords adequate protection to the environment. UNEP recognises that the natural environment—forests, soils and wetlands—contributes to the management and regulation of water availability and water quality, strengthening the resilience of watersheds and complements investments in physical infrastructure and institutional and regulatory arrangements for water access and disaster preparedness.

151. SDG 13 emphasises the urgent action required to combat climate change and its impacts. This is based on the recognition that extreme weather events such as heat waves, droughts, floods and tropical cyclones have aggravated the need for water management, pose a threat to food security, increase health risks, damage critical infrastructure and interrupt the provision of basic civil services.

152. The statistics on climate change indicate that:

152.1. Between 1880 and 2012, average global temperatures have increased by 0.85°C.

152.2. Between 1901 and 2010, as ocean expanded, the global average sea level has risen by 19 cm.

152.3. Since 1990, global emissions of CO₂ increased by almost 50%.

152.4. Between 2000 and 2010, emissions grew at a more rapid rate than each of the three decades preceding it.

153. In this backdrop, SDG 16 emphasises the need to protect, restore and promote sustainable use and management of terrestrial ecosystems and forests, combat desertification of river lands, prevent land degradation and halt the loss of biodiversity. Terrestrial ecosystems provide a range of ecosystem services including the capture of carbon, maintenance of soil quality, provision of habitat for biodiversity, maintenance of water quality and regulation of water flow together with control over erosion. Maintenance of ecosystems is hence

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crucial to efforts to combat climate change, mitigate and reduce the risks of natural disasters including floods and landslides. In this backdrop, promoting environmental justice and ensuring strong institutions is quintessential to promoting peaceful and inclusive societies for sustainable development. SDG 16, therefore, construes the promotion of the rule of law as intrinsic towards implementing multilateral environmental agreements and progressing towards internationally agreed environmental goals.

154. On 2-10-2016, India ratified the Paris Agreement²⁵ on climate change which reaffirmed the goal of “limiting global temperature increase to well below 2°C, while pursuing efforts to limit the increase to 1.5 degrees above pre-industrial levels”. Article 5 of the Agreement encourages parties to conserve and enhance sinks and reservoirs of greenhouse gases, which include forests. Under its Nationally Determined Contributions under the Paris Agreement, India made the following three commitments²⁶:

(i) Greenhouse gas emission intensity of its gross domestic product will be reduced by 33-35% below 2005 levels by 2030;

(ii) 40% of India’s power capacity would be based on non-fossil fuel sources; and

(iii) An additional “carbon sink” of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover will be created by 2030.

155. In March 2019, UNEP released the Global Environment Outlook themed “Healthy Planet, Healthy People”²⁷. Noting clear “links between human health and the state of the environment”, the report concludes that clean-up and efficiency improvements are not adequate to pursue the 2030 Agenda and SDGs and achieve the internationally agreed environmental goals on pollution control. Instead, “transformative change” which reconfigures basic social and production systems and structures is needed. This includes well-designed policies on institutional frameworks, social practices, cultural norms and values along with their implementation, compliance and enforcement. In this view, a systemic and integrated policy action²⁷ would ensure that a “healthy environment is a prerequisite and foundation for economic prosperity, human health and well-being”²⁷.

156. The rule of law requires a regime which has effective, accountable and transparent institutions. Responsive, inclusive, participatory and representative decision making are key ingredients to the rule of law. Public access to information is, in similar terms, fundamental to the preservation of the rule of law. In a domestic context, environmental governance that is founded on the rule of law emerges from the values of our Constitution. The health of the environment is key to preserving the right to life as a constitutionally recognised value under Article 21 of the Constitution. Proper structures for environmental decision making find expression in the guarantee against arbitrary action and the affirmative duty of fair treatment under Article 14 of the Constitution.

²⁵ Entered into force on 4-11-2016.

²⁶ India’s Intended Nationally Determined Contribution: Working Towards Climate Justice at P. 29, submitted to the UNFCCC secretariat.

²⁷ Global Environment Outlook 6, UNEP, 4-3-2019

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- 157.** The 2006 Notification must hence be construed as a significant link in India's quest to pursue SDGs. Many of those goals, besides being accepted by the international community of which India is a part, constitute a basic expression of our own constitutional value system. Our interface with the norms which the international community has adopted in the sphere of environmental governance is hence as much a reflection of our own responsibility in a context which travels beyond our borders as much as it is a reflection of the aspirations of our own Constitution. The fundamental principle which emerges from our interpretation of the 2006 Notification is that in the area of environmental governance, the means are as significant as the ends. The processes of decision are as crucial as the ultimate decision. The basic postulate of the 2006 Notification is that the path which is prescribed for disclosures, studies, gathering data, consultation and appraisal is designed in a manner that would secure decision making which is transparent, responsive and inclusive.
- 158.** Repeatedly, it has been urged on behalf of the State of Goa, MoEFCC and the concessionaire that the need for a new airport is paramount with an increasing volume of passengers and consequently the flaws in the EIA process should be disregarded. The need for setting up a new airport is a matter of policy. The role of the decision-makers entrusted with authority over the EIA process is to ensure that every important facet of the environment is adequately studied and that the impact of the proposed activity is carefully assessed. This assessment is integral to the project design because it is on that basis that a considered decision can be arrived at as to whether necessary steps to mitigate adverse consequences to the environment can be strengthened.
- 159.** In the present case, as our analysis has indicated, there has been a failure of due process commencing from the non-disclosure of vital information by the project proponent in Form 1. Disclosures in Form 1 are the underpinning for the preparation of ToR. The EIA report, based on incomplete information has suffered from deficiencies which have been noticed in the earlier part of this judgment including the failure to acknowledge that within the study area contemplated by the Guidance Manual, there is a presence of ESZs.
- 160.** EAC, as an expert body abdicated its role and function by taking into account circumstances which were extraneous to the exercise of its power and failed to notice facets of the environment that were crucial to its decision making. The 2006 Notification postulates that normally, MoEFCC would accept the recommendation of EAC. This makes the role of EAC even more significant. NGT is an adjudicatory body which is vested with appellate jurisdiction over the grant of an EC. NGT dealt with the submissions which were urged before it in essentially one paragraph. It failed to comprehend the true nature of its role and power under Section 16(h) and Section 20 of the NGT Act, 2010. In failing to carry out a merits review, NGT has not discharged an adjudicatory function which properly belongs to it.
- 161.** In this view of the matter, neither the process of decision making nor the decision itself can pass legal muster. Equally, as an area requiring balance between development of infrastructure and the environment, we are of the view that appropriate directions should be issued by this Court, which would ensure that while the need for a public project as significant as an international

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airport is duly factored into the decision making calculus, such development proceeds on a considered view of the importance of the prevailing state of the environment. Bearing in mind the need to bring about a wholesome balance between the development of infrastructure of an airport and the preservation of the environment, we have come to the conclusion that time-bound directions should be issued.

162. Bearing in view the necessity to maintain a balance between the need for an airport and environmental concerns, we are of the view that it would be appropriate if EAC is directed to revisit the conditions subject to which it granted its EC on the basis of the specific concerns which have been highlighted in this judgment. Such an exercise primarily is for EAC to carry out in its expert decision-making capacity. EAC is entrusted with that function as an expert body. The role of judicial review is to ensure that the rule of law is observed. Hence, we propose by the directions which we will issue under Article 142 of the Constitution, to direct EAC to revisit the conditions for the grant of an EC. While doing so, it would be open to EAC to have due regard to the conditions which were incorporated in the order of NGT and to suitably modulate those conditions in pursuance of the liberty which we have preserved to it. To facilitate an expeditious decision, we propose to direct EAC to carry out this exercise in a prescribed time schedule during which period, EC shall remain suspended. We propose to direct that after EAC has formulated its views, they shall be placed before this Court in a miscellaneous application in the present proceedings, so as to enable the Court to pass final orders. The miscellaneous application may be filed either by the State of Goa as the project proponent or by MoEFCC. We clarify that no other court or tribunal shall entertain any challenge to the ultimate decision of EAC and final orders thereon shall be passed by this Court in the present proceedings.

K. Directions

163. We accordingly issue the following directions:

163.1. EAC shall revisit the recommendations made by it for the grant of an EC, including the conditions which it has formulated, having regard to the specific concerns which have been highlighted in this judgment.

163.2. EAC shall carry out the exercise under 163.1 above within a period of one month of the receipt of a certified copy of this order.

163.3. Until EAC carries out the fresh exercise as directed above, EC granted by MoEFCC on 28-10-2015 shall remain suspended.

163.4. Upon reconsidering the matter in terms of the present directions, EAC, if it allows the construction to proceed will impose such additional conditions which in its expert view will adequately protect the concerns about the terrestrial ecosystems noticed in this judgment. EAC would be at liberty to lay down appropriate conditions concerning air, water, noise, land, biological and socioeconomic environment.

163.5. EAC shall have due regard to the assurance furnished by the concessionaire to this Court that it is willing to adopt and implement necessary safeguards bearing in mind international best practices governing greenfield airports.

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163.6. We grant liberty to the State of Goa as the project proponent and MoEFCC, as the case may be, to file the report of EAC before this Court in the form of a miscellaneous application so as to facilitate the passing of appropriate orders in the proceedings.

163.7. No other court or tribunal shall entertain any challenge to the report that is to be submitted before this Court by EAC in compliance with the present order.

164. Before we part with the present case, we consider it appropriate to record a finding on the bona fides of the appellants before this Court. It was briefly urged by the respondents that the appellants have invoked the jurisdiction of this Court based on a personal agenda and consequently, the present appeal is liable to be dismissed. This argument cannot be accepted. We accept the submission of Ms Shenoy, learned counsel appearing on behalf of the appellants, that the non-consideration of vital issues by EAC has led to the invocation of the statutory remedy available to them under Section 22 of the NGT Act, 2010. Vague aspersions on the intention of public-spirited individuals does not constitute an adequate response to those interested in the protection of the environment. If a court comes to the finding that the appeal before it was lacking bona fides, it may issue directions which it thinks appropriate in that case. In cases concerning environmental governance, it is a duty of courts to assess the case on its merits based on the materials present before it. Matters concerning environmental governance concern not just the living, but generations to come. The protection of the environment, as an essential facet of human development, ensures sustainable development for today and tomorrow.

165. The learned Attorney General for India has presented the submissions before this Court with his characteristic sense of objectivity and candour. We wish to record our appreciation for the able assistance rendered to this Court by Ms Anitha Shenoy, learned counsel for the petitioner, Mr A.N.S. Nadkarni, learned Additional Solicitor General for MoEF, Mr Parag P. Tripathi, learned Senior Counsel and Ms Aastha Mehta, learned counsel for the concessionaire.

166. The appeal is allowed in the above terms. There shall be no order as to costs.

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167. This appeal is also disposed of in the same terms, conditions, directions and observations as in Civil Appeal No. 12251 of 2018.

Item No.2:-**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI***(Through Video Conference)***Appeal No.05 of 2022(SZ) &
I.A. Nos.194 to 196 of 2022 (SZ)****IN THE MATTER OF:****Shaji A.K.**

Aged 49 years,
S/o. Kuryakose,
Arakkal House, Perinkari PO,
Kannur District.

...Appellant(s)

With**1) Ministry of Environment, Forests & Climate Change**

Indira Paryavaran Bhawan,
Jor Bagh, Ali Ganj,
New Delhi – 110 003.
Represented by its Secretary

2) State Environmental Impact Assessment Authority

KSRTC Bus Terminal Complex, 4th Floor,
Thampanoor, Thiruvananthapuram,
Kerala - 695 001
Represented by its Member Secretary

3) State Level Expert Appraisal Committee

KSRTC Bus Terminal Complex, 4th Floor,
Thampanoor, Thiruvananthapuram,
Kerala - 695 001
Represented by its Member Secretary

4) The Administrator

State Environmental Impact Assessment Authority,
KSRTC Bus Terminal Complex, 4th Floor,
Thampanoor, Thiruvananthapuram,
Kerala - 695 001
Represented by its Chairman

**5) M/s Calicut Landmark Builders and Developers of (India)
Pvt. Ltd.**

Landmark World, N H 17 Bypass,
Kozhikode, Kerala- 673 014
Represented by its Director Anwar Sadath.

...Respondent(s)

For Appellant(s): Mr. Harish Vasudevan.

For Respondent(s): Mrs. Me. Sarashwathy for R1.
Mr. S. Saravanan and Mr. Karthikeyan represented
Mrs. Vidyalakshmi Vipin for R2 to R4.
Mr. B.G. Bhaskar and
Mr. K.R. Harin for R5.

Judgment Reserved on: 18th April, 2023.

Judgment Pronounced on: 11th September, 2023.

CORAM:

HON'BLE Smt. JUSTICE PUSHPA SATHYANARAYANA, JUDICIAL MEMBER

HON'BLE Dr. SATYAGOPAL KORLAPATI, EXPERT MEMBER

JUDGMENT

Delivered by Justice Pushpa Sathyanarayana, Judicial Member

- 1.** The above appeal is directed against the grant of Environmental Clearance issued by the 2nd Respondent/ State Environmental Impact Assessment Authority, Kerala (for short "SEIAA - Kerala") on 12.03.2020 in favour of the Project Proponent/Respondent No.5 viz., M/s. Calicut Landmark Builders & Developers (India) Private Limited who is involved in the business of real estate, building projects and town area development projects in various parts of Kerala.
- 2.** The appellant is a resident of the Perinkari area in Kannur District and a social activist involved in activities of protection and improvement of the environment.
- 3.** According to the appellant, the Project Proponent has proposed to construct two residential towers (210) units, studio apartment (204 unit), Business park, 70 key hotel with restaurant facility and 500 pax convention centre and a club house. The total plot area of the project is 3.309 Hectares and the total built-up area

is 81,589 Square Meters, and the total project cost is Rs.350 Crores. The Project Proponent had filed an application dated 27.11.2018 before the 2nd Respondent/SEIAA – Kerala in Form – IA. It is the main contention of the appellant that the Project Proponent had furnished incorrect information about the nature of the lands, its ecological features, specialities and the presence of flora and fauna.

4. The Project Proponent also suppressed the fact that the plot is having water channels and agricultural landscape which was mined out for construction. It is further alleged that the SEAC – Kerala and SEIAA – Kerala had not considered the application in its proper perspective.

5. The appeal is filed on several grounds which are as follows:-

- (i) The Environmental Clearance issued by the SEIAA - Kerala is without any authority or power as the SEIAA - Kerala has got no power to give post facto Environmental Clearance for building / township area project which is constructed for more than 20,000 Square Meters prior to obtaining the Environmental Clearance.
- (ii) The Project Proponent ought not to have started the construction even before obtaining the Environmental Clearance as per the EIA Notification, 2006.
- (iii) Admittedly, the Project Proponent started the construction in the year 2016 without obtaining Environmental Clearance and completed the same in the year 2017 itself before the impugned Environmental Clearance was granted.
- (iv) The SEIAA - Kerala had taken the decision without any proper appraisal of the recommendation of the SEAC – Kerala with specific conditions.
- (v) The SEAC – Kerala had conducted the site inspection and imposed conditions after the Environmental Clearance was issued are arbitrary and procedure not known to law and the same is without any authority.
- (vi) The SEIAA – Kerala sought a clarification from the MoEF&CC on the procedure to be followed in case of violation since the said Notification has got only a window period of six months.

- (vii) Even before obtaining the said clarification, at the request of the Project Proponent, the SEIAA – Kerala had decided to issue the Environmental Clearance considering the same as an expansion project that too without any appraisal by the SEAC – Kerala.
- (viii) The SEIAA – Kerala has imposed a condition that the SEAC – Kerala should inspect the site for compliance with the conditions imposed in the Environmental Clearance.
- (ix) On the date of issuance of the Environmental Clearance, 90% of the project was completed defeating the requirement of prior Environmental Clearance.
- (x) As post facto Environmental Clearance is not recommended under the environmental laws, issuing an Environmental Clearance for a project which is already commenced is without any authority and issued in violation of the environmental laws, which is an unfair practice.
- (xi) The decision of the SEIAA - Kerala to treat the project as an expansion project is against the EIA Notification, 2006. It is settled law that a piecemeal approach to avoid the clutches of EIA Notification, 2006 is to be defeated.
- (xii) After the commencement of the construction, altering the land and environment fully by a project that is less than the threshold limit of the EIA Notification and later tagged the same as an expansion project would defeat the very purpose of the EIA Notification and its process. As the acts of the project proponent are against the '*Precautionary Principle*' and '*Sustainable Development*', the Environmental Clearance granted is sought to be set aside.

6. The 1st Respondent which is Ministry of Environment, Forests and Climate Change (MoEF&CC) has filed a reply to the appeal stating that the EIA Notification, 2006 regulates developmental projects in respect of construction of new projects/ activities/ expansion or modernization of existing projects in different parts of the country. The said notification covers more than 39 projects, including infrastructure projects i.e. Airports, Ports, Highways, Building and Construction Projects, etc. All new projects/ activities listed in the Schedule to the EIA Notification, 2006 require prior Environmental Clearance. The

'Construction Projects' and 'Township and Area Development Projects' are covered under entries 'A' and 'B' of the Schedule to the EIA Notification, 2006 and any Project Proponent is required to obtain prior Environmental Clearance if the project falls within any of these categories covered under the EIA Notification, 2006.

7. In the **reply filed by Respondents No.2 to 4**, it is stated that the Project Proponent on 24.11.2018 had made an application seeking Environmental Clearance for the proposed Mixed-use Township Development Project 'Landmark Trade Centre' in Sy. Nos.27/1, 30/4C, 31/4, 7, 8, 9, 32/4, and 351 B of Pantheerankavu Village, Kozhikode Taluk, Kozhikode District, State of Kerala. The said project comes under Category – B of Schedule 8 (a) to the EIA Notification, 2006. Admittedly, the built-up area is 81,589 Square Meters spread over an extent of 3.309 Hectares. It is stated that it was considered in the 89th Meeting of the SEAC – Kerala on 04.12.2018, and after scrutiny, certain particulars were sought for from the Project Proponent. Once again, the same was placed in the 95th Meeting held on 27th & 28th March 2019.
8. In the reply, it is specifically stated that the Project Proponent had started the land development and construction even before receiving the Environmental Clearance and permit from the Local Self Government. On 22.05.2019, the SEAC – Kerala decided to recommend the SEIAA – Kerala for initiating action against the Project Proponent for violating the relevant rules and regulations for issuance of Environmental Clearance. Accordingly, the SEIAA – Kerala, on 30.05.2019, had directed the District Collector and the Secretary – Kozhikode Corporation to issue a stop memo and report compliance for initiating violation proceedings against the Project Proponent as per the EIA Notification, 2006. The Project Proponent had submitted a representation dated 12.06.2019, contending that the project does not come under the purview of the violation proceedings. Again, in the 95th Meeting of the SEIAA - Kerala, the request was considered and once again, the SEIAA – Kerala recommended the District Collector to issue a stop memo and report compliance. Once again, the Project Proponent had informed that as per the Judgment of the Hon'ble

Supreme Court in *T.N. Godavarman Thirumulpad's* case, no Environmental Clearance is required from the SEIAA – Kerala for the building of township below the area of 1,50,000 Square Meters and requested the SEIAA – Kerala to consider their application. The said letter was considered by the SEIAA – Kerala on 24.09.2019. It was noted by the SEIAA – Kerala that the building permit was granted by the Olavanna Grama Panchayat on 26.10.2017 and noted that this project is basically a township development project but covered under Category B - 8 (a) of the Schedule, as the built up area is 81,589 Square Meters, which is less than 1,50,000 Square Meters required for considering the project under 'Township and Area Development Projects'. In view of the magnitude of the project which is likely to have an environmental impact, the SEIAA – Kerala decided to consider the same as a violation category since the construction commenced before obtaining the Environmental Clearance. While so, the project proponent requested vide Letter dated 26.08.2019 for withdrawal of violation proceedings relying on the Hon'ble Supreme Court's Judgment. However, the SEIAA – Kerala found that this judgment relates to a different project in the State of Uttar Pradesh, specific to that project under the given circumstance of the case and the same may not be made uniformly applicable to other projects in the whole of the country. The SEIAA – Kerala further noted that the project is covered under Schedule 8(a) and there is no ambiguity on that account and the proposal was processed accordingly from the beginning. The SEIAA – Kerala also sought for clarification from the MoEF&CC on the procedure to be followed in respect of the violation category. But before the clarification was issued by the MoEF&CC, based on the further representation made by the project proponent, the proposal was considered by SEIAA – Kerala on 23.12.2019. The project proponent had represented before the SEIAA – Kerala that the construction work of only one building with a built-up area of less than 20,000 Square Meters was commenced, for which, no Environmental Clearance is required and that they have wrongly stated that the project is totally a new project and represented that the project is an expansion of existing building and they have made a mistake in Form – I by not mentioning it as it is and requested to treat their

application as an application for expansion of existing building of area less than 20,000 Square Meters. The SEIAA - Kerala also noted all the developments that had taken place after the submission of the application for Environmental Clearance and held that there have been no violations of the EIA Notification, 2006. The Project Proponent also stated that since it was only a mistake and the construction activity was taken up only after getting permission from the Local Authority viz., Olavanna Grama Panchayat, the Project Proponent also had given a written statement in this regard. As the Project Proponent had given an undertaking that no further construction would be taken up in excess of 20,000 Square Meters without taking prior Environmental Clearance, the SEIAA - Kerala decided to give approval for the project considering the same as an expansion subject to the conditions mentioned therein. Accordingly, the Environmental Clearance was issued in favour of the Project Proponent which is now under challenge.

9. The **5th Respondent (M/s. Calicut Landmark Builders & Developers (India) Private Limited) who is the Project Proponent** had filed its counter in the appeal. According to the Project Proponent, the Hon'ble Supreme Court had held that Environmental Clearance is not required for a township project if the threshold limit is not met as in the *Noida Park* case. The said contention was also alleged to have been raised before the SEIAA – Kerala. However, the same was negatived holding that the project comes under Item 8 (a) and not under Item 8 (b). The Project Proponent reiterated that the project comes only under Item 8(b) and not under Item 8 (a) if it is viewed in the light of the Hon'ble Supreme Court's ruling. Even if it is assumed that there is a violation of the rules due to the commencement of the construction prior to the grant of Environmental Clearance, it can only invite appropriate action for the breach provided in the relevant law and should not cast any shadow on the consideration of the application for grant of Environmental Clearance.

10. The Project Proponent further stated that the SEIAA – Kerala cannot cancel the clearance granted, as the same has not resulted in any environmental damage. The Sub-Committee of the SEAC – Kerala which visited the site saw a part of the building covered by the Panchayat permit with just one floor and unfinished roof, and misconstrued it as part of the building, for which, the Environmental Clearance was filed. The idea of expanding the intended building construction into a township arose later and the EIA Notification, 2006 expressly encompasses the expansion of a building project and is not restricted to a new project alone. Expansion necessarily implies the existence of a structure before the filing of the application. The trade centre project, for which, the prior Environmental Clearance was sought was intended as a 'Township' with a built-up area of 81,589 Square Meters comprising different types of buildings such as residential towers, studio apartments, hotel and convention centre, club house and business park. The 508.84 Square Meters building which was seen by the Sub-Committee members is not integrated into the hotel and convention centre part of the township and explained the same to the SEIAA – Kerala. Only after the SEIAA – Kerala was convinced that there was no violation before the sanction of the project and after detailed deliberations, the Environmental Clearance was granted. The advertisements referred to in the appeal, which have not been exhibited, cannot and do not relate to the building, for which, the Environmental Clearance was given and it is claimed that the appellant is attempting to mislead the Tribunal.

11. It is further contended in the reply that the allegation that the properties are marshy and low-lying land on one side and hillock on the other end and that hillock is removed, red earth removed, water channels and water table have been seriously affected are all baseless and false. It is suspected that the present appellant is pawn in the hands of some vested interests who are inimical to the project proponent and it is also to be noted that no one from the entire Kozhikode Corporation has chosen to file any complaint to this Tribunal. The appellant is a resident of

Kannur with a perfunctory acquaintance of the area of operation and the accusation of the appellant is unfounded.

12. From the above pleadings, the questions that arise for consideration are:-

(I) Whether the Environmental Clearance granted to the Project Proponent by the SEIAA – Kerala without any appraisal by the SEAC – Kerala is liable to be set aside?

(II) Whether a project with 81,589 Square Meters of built-up area if named as a 'Mixed-use Township Project' does not require prior Environmental Clearance?

Issue No.1:-

13. The learned counsel appearing for the appellant contended that the project is a building construction project which is evident from the basic information provided in Form – I Application by the Project Proponent. As the total built-up area exceeds 20,000 Square Meters, the Project Proponent shall obtain a prior Environmental Clearance before the construction work or preparation of land by the project management. The Project Proponent had clearly mentioned in Form – I that it is a new project by mentioning 'Building and Construction Project' with a built-up area of 81,589 Square Meters which falls under Item 8 (a) category. Since the Project Proponent had clearly mentioned that the proposed project was coming within the Category 8 (a), it should be viewed only as it is and the same cannot be changed. The Project Proponent also obtained a building permit for 57,443.6 Square Meters built-up area on 30.05.2020. Therefore, it is evident from the building permit dated 30.05.2020, the entire construction is designed as a single building construction project for the purpose of obtaining a

building permit under the local laws. The EIA Notification, 2006 does not provide a definition for building construction.

- 14.** It is stoutly denied by the appellant that the project is only an area development project as claimed by the Project Proponent. They should have applied only for a land development permit and not a building permit from the local panchayat.
- 15.** The building permit obtained from the panchayat is for more than 20,000 Square Meters which would clearly indicate that the Project Proponent was proposing only a building construction project and not an area development project and it comes under Item 8 (a) category, as rightly mentioned by the Project Proponent in Form – I. Even in the impugned Environmental Clearance, it is mentioned only as a project coming under the Category 8 (a) which is not challenged by the Project Proponent at any time. Therefore, the argument of the Project Proponent that this is not a building construction project is unacceptable and it is only a building construction project.
- 16.** The next ground raised by the appellant is that the Project Proponent had suppressed the material fact in Form – I and Form – IA. It is stated that there are wetlands, paddy lands, and water streams near the project site which are to be revealed in Form – I, as the presence of paddy lands, wetlands and water streams are critical information and matters for the appraisal of the project. The Project Proponent had deliberately concealed the information which is vital for the Environmental Impact Assessment.
- 17.** In this regard, it would be appropriate to advert to the Annexure – A15 which is the proceeding of the Sub Collector – Kozhikode dated 02.12.2019. This is a proceeding for the conversion of land as per the Kerala Conservation of Paddy Land and Wetland Act, based on the application submitted by Mr. C. Anwar Sadath who is the Director of the 5th Respondent unit. In the above said proceedings, conversion was granted on the condition that "(1) *The construction shall be done without causing any damage to the nearby water streams/ wetlands/ nearby agricultural lands.*"

(2) Applicant is duty bound to pay additional fees if any error is found in the calculation of the fair value, on a later point of time”.

- 18.** From the above document, it is evident that the Project Proponent had applied for the conversion of paddy lands subsequent to the application made for Environmental Clearance. Therefore, even on the ground of suppression of material facts, the SEIAA – Kerala ought to have recalled the Environmental Clearance granted.
- 19.** The learned counsel for the appellant invited our attention to Clause 8 (vi) of the EIA Notification which provides for the rejection of the application and/or cancellation of the prior Environmental Clearance granted on the basis of the deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application.
- 20.** It is pointed out that even though there is a statutory duty imposed on SEIAA – Kerala to reject the application or cancel the Environmental Clearance for furnishing wrong / false / misleading information, the SEIAA – Kerala has not done the same till now.
- 21.** When the Project Proponent had commenced its construction and made alterations in the land by laying roads, removing of earth and levelling the same, the prior Environmental Clearance should have been obtained. Even before obtaining the Environmental Clearance, the above mentioned works were commenced by the Project Proponent.
- 22.** The Project Proponent ought to have obtained prior Environmental Clearance before any construction work or preparation of the land on the project site. After commencing the same, the Project Proponent has made an application before the SEIAA – Kerala for obtaining Environmental Clearance. When it is specifically found by the SEIAA – Kerala that the project/activity has started in violation of the EIA Notification,

the application filed by the Project Proponent should have been rejected on the very same ground and initiated violation proceedings for commencing the activity before obtaining the Environmental Clearance. The SEAC – Kerala had not made any recommendation for grant of Environmental Clearance. The recommendation of the SEAC – Kerala is that the project is being constructed prior to the grant of Environmental Clearance and the same has to be considered as a violation category, besides initiating action for the violations was accepted by the SEIAA – Kerala in its 93rd, 95th, 97th and 100th Meetings held on 30.05.2019, 29.07.2019, 24.09.2019 and 23.12.2019 respectively. Whereas, the SEIAA – Kerala, based on the representation made by the Project Proponent had suddenly changed its stand and granted the impugned Environmental Clearance in its 101st Meeting held on 17th & 18th January 2020.

- 23.** The above sequence of events and the records also clearly reveal that the SEIAA – Kerala had granted the Environmental Clearance without the recommendation of the SEAC – Kerala which is in gross violation of the procedures prescribed in the EIA Notification, 2006.
- 24.** In this regard, the relevant provisions of the EIA Notification, 2006 can be usefully referred to:-

"8. Grant or Rejection of Prior Environmental Clearance (EC):

(i) The regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the applicant within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environment Impact Assessment Report, and where Environment Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents, except as provided below.

(ii) The regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement. An intimation of this decision shall be

simultaneously conveyed to the applicant. The Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, in turn, shall consider the observations of the regulatory authority and furnish its views on the same within a further period of sixty days. The decision of the regulatory authority after considering the views of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be final and conveyed to the applicant by the regulatory authority concerned within the next thirty days."

- 25.** The above provision makes it very clear that the appraisal and specific recommendation of the SEAC is mandatory for consideration by the SEIAA for the grant of Environmental Clearance. The SEAC and SEIAA being the regulatory bodies, the decision making process of these authorities must be transparent. It is a bounden duty of the SEAC and SEIAA to draw a balance between the need for development on the one hand and the protection of environment on the other hand.
- 26.** In the instant case, though the SEAC – Kerala had not recommended the project, the SEIAA – Kerala had gone ahead in issuing the Environmental Clearance at the instance of the Project Proponent is vitiated in the eye of law. It only reflects on the SEIAA – Kerala that it is lacking in a transparent and responsible decision making process.
- 27.** Therefore, on what basis, the SEIAA - Kerala had considered the project as an expansion project and granted Environmental Clearance in gross violation of the rules in force is not known. It is also contrary to the application submitted for a new project by the project proponent which raises doubt about the transparency and accountability of the decision making process of the SEIAA – Kerala.
- 28.** It is also to be noted that as per Annexure A7, which is the Minutes of the 97th Meeting of the SEIAA - Kerala, it is recorded that when the expert team of SEAC visited the project site for field verification, the team noticed that the constructions had already started without obtaining the Environmental Clearance and hence, there was a violation. The SEAC – Kerala accepted the Sub-Committee's report and recommended the SEIAA – Kerala for initiating violation proceedings. Accordingly, vide

Letter dated 27.08.2019, the SEIAA – Kerala directed the District Collector – Kozhikode to issue a stop memo and report compliance at the earliest.

- 29.** The said decision dated 24.09.2019 has also not challenged by the Project Proponent till date and the decision has also not been withdrawn by the SEIAA – Kerala yet. The above observations only confirm that the project is a case of violation and the SEIAA - Kerala is empowered to initiate action against the Project Proponent.
- 30.** For the above said reasons, we hold that the issuance of the Environmental Clearance dated 12.03.2020 is without jurisdiction and without following the prescribed procedures and is liable to be set aside. Accordingly, the Environmental Clearance is set aside.

Issue No.2:-

- 31.** Regarding the issue of whether the project in question requires prior Environmental Clearance, admittedly, the permit granted by the Local Grama Panchayat is for 57,443.6 Square Meters. Even according to the permit and plan issued by the Local Grama Panchayat, it is not a mere area development project but a building construction project. In this regard, it is submitted that the EIA Notification, 2006 applies to all projects with built-up area of greater than 20,000 Square Meters irrespective of the nature of the project/activity.
- 32.** In this regard, the learned counsel for the appellant places his reliance on **2014 SCC Online Del 3264 (Maruthi Suzuki India Limited Vs. MoEF&CC and Ors.)**

"13. In rejoinder, the petitioner submits that the circular clearly pertains to SEZs and does not in any way, support the respondent No.2's view that all projects and activities having a built-up area of >20,000 sq. mts., irrespective of the nature of the project or activity, would require EC.

14. Having heard learned counsel for parties, this Court is of the view that the EIA Notification 2006 applies to all projects with a built up area of > 20,000 sq. mts. irrespective of the nature of the project or activity. Omission of some words/expressions from the draft EIA Notification 2006, which are superfluous, would not assist the petitioners. Moreover, deletion of words/expressions from a draft Notification is not equivalent to a deletion of words/expressions from an existing statute or Notification. Also internal notings of Government officials cannot be a guide to interpretation when the Notification is otherwise free from ambiguity."

33. Though in the above referred case, after holding so, the Hon'ble High Court had permitted the issuance of post facto clearance. It was categorically held that the present order was passed on the peculiar facts and circumstances of the case and the same shall not be treated as precedent.

34. The learned counsel for the Project Proponent contended that the project does not require prior Environmental Clearance since the total built-up area is only 81,589 Square Meters which is less than 1,50,000 Square Meters and the project is coming under 'Mixed-use Township Project'. Therefore, the township projects only fall under Item 8(b) and not under Item 8(a) of the EIA Notification, 2006. Since the threshold limits were not reached, their project does not require a prior Environmental Clearance and it was not by mistake, the Project Proponent had applied for prior Environmental Clearance and obtained the same.

35. The relevant provisions of the EIA Notification, 2006 in Item 8 are as follows:-

8(a) – Building and Construction projects, for which, prior EC is required for built-up area of greater than 20,000 Square Meters For the project between 20,000 Square Meters to 1,50,000 Square Meters will be considered as 'B' Category projects and prior EC is to be granted by the SEIAA.

8(b) – Townships and Area Development projects. For projects with built-up area of greater than 1,50,000 Square Meters and less than 3,00,000 Square Meters or covering an area greater than or equal to 50 Hectares and less than 150 Hectares will be considered as projects falling under 'B' category, for which, EC is to be granted by the SEIAA. In case the project has a built-up area of greater than or equal to 3,00,000 Square Meters or covering an area of greater than or equal to 150 Hectares, the project will be treated as 'A' category and EC is to be granted by the MoEF&CC.

36. From the above, it can be seen that any project having a built-up area of more than or equal to 20,000 Square Meters requires prior Environmental Clearance, whether it is a standalone building project or a component of a township. Building projects having less than 1,50,000 Square Meters but more than or equal to 20,000 Square Meters even if they are not a part of the township will require prior Environmental Clearance under 8(a) and if the built-up area is more than 1,50,000 Square Meters it will be considered as Township under 8(b).

37. The reliance of the Respondent on the orders of the Hon'ble Supreme Court in **In Re: Construction of park at Noida near Okhla Bird Sanctuary - Anand Arya & Anr. / T.N. Godavarman Thirumulpad Vs. Union of India & Ors. (I.A. Nos.2609-2610 of 2009 in Writ Petition (CIVIL) No.202 of 1995)** reported in **(2011) 1 SCC 744** needs to be examined.

38. The impugned project in the above case is a recreational park involving the construction of a national memorial, commemoration plaza, larger than life-size statues, pedestrian pathways, boundary wall, hard landscape, soft landscape, etc.

39. In the above referred *Noida Park* case, it was held by the Hon'ble Supreme Court that

"55. It is extremely difficult to accept the contention that the categorization under items 8 (a) and 8 (b) has no bearing on the nature and character of the project and is based purely on the built up area. A building and construction project is nothing but addition of structures over the land. A township project is the development of a new area for residential, commercial or industrial use. A township project is different both quantitatively and qualitatively from a mere building and construction project. Further, an area development project may be connected with the township development project and may be its first stage when grounds are cleared, roads and pathways are laid out and provisions are made for drainage, sewage, electricity and telephone lines and the whole range of other civic infrastructure. Or an area development project may be completely independent of any township development project as in case of creating an artificial lake, or an urban forest or setting up a zoological or botanical park or a recreational, amusement or a theme park."

40. It was also held by the Hon'ble Supreme Court that

"57. In light of the above discussion it is difficult to see the project in question as a "Building and Construction project". Applying the test of 'Dominant Purpose or Dominant Nature' of the project or the "Common Parlance" test, i.e. how

a common person using it and enjoying its facilities would view it, the project can only be categorized under item 8(b) of the schedule as a Township and Area Development project". But under that category it does not come up to the threshold marker inasmuch as the total area of the project (33.43 hectares) is less than 50 hectares and its built-up area even if the hard landscaped area and the covered areas are put together comes to 1,05,544.49 square metres, i.e., much below the threshold marker of 1,50,000 square metres."

- 41.** From the above, it is very clear that the order pertains to a project where the 'dominant purpose' is that of an 'Area Development Project' and not that of a 'Building and Construction Project'. In the instant case, the project is primarily a 'Building and Construction Project' in a small area of 3.309 hectares and the built-up area (covered area) is 81,589 Square Meters consisting of 2 residential towers (210 units), studio apartment (204 units), Business park, 70 key hotel with restaurant facility and 500 pax convention centre and a club house which reveals that the project is primarily a 'Building and Construction Project' which requires prior Environmental Clearance in view of the huge environmental impact the project is likely to have both during construction and operation phase of the project. Therefore, we do not see any inconsistency in the findings of the SEIAA – Kerala that the project requires prior Environmental Clearance though we do not agree with the treatment of the project as an expansion project by the SEIAA – Kerala.
- 42.** Merely naming a project as a 'Mixed-use Township Project' will not make it a project under Item 8 (b). If the contention of the project proponent is accepted, it will be open for any project proponent to name their project as 'Township' and propose a built-up area that is just less than 1,50,000 Square Meters and claim that prior Environmental Clearance is not required. On the other hand, the projects which are having a nomenclature of 'Building projects' with a built-up area of more than or equal to 20,000 Square Meters will require prior Environmental Clearance to assess the environmental impact and impose necessary conditions to protect the environment.

43. The intention of the legislature cannot be to assess a project having a built-up area of more than or equal to 20,000 Square Meters for a grant of prior Environmental Clearance and by a mere change in nomenclature to Township, projects with a built-up area of greater than 20,000 Square Meters but less than 1,50,000 Square Meters be exempt from the EIA Notification, 2006.

44. In the instant case, it is also to be noted that the built-up area of the project is 81,589 Square Meters, which will have a huge environmental impact in that area not only during the construction phase but also post-completion of the project, impacting the environment in the following aspects: -

- (a) Change in habitat in the project area as well as in the neighbourhood which can have deleterious impacts on the fauna.
- (b) Likely pollution and absence of appraisal and stipulation of mitigation measures can have a serious bearing on soil, air (both air quality and noise pollution), and water bodies.
- (c) The presence of a large number of dwelling units (210 + 204 = 414 units) will itself generate huge quantities of both solid and liquid waste which requires critical scrutiny and imposition of conditions to mitigate the impacts of solid and liquid waste generated on a daily basis.
- (d) In view of the massive project, it is evident that the traffic in the area will increase significantly which also requires technical analysis for imposing necessary conditions to prevent air pollution viz., both air quality and noise levels.

45. From the above, it is evident that the project of a size of 81,589 Square Meters will require a detailed environmental impact assessment in order to protect the environment and ensure that there is no adverse impact on the environment in the project

area as well as in the neighbourhood. Any interpretation as contended by the project proponent will lead to gross misuse of the provisions of the EIA Notification, 2006, leading to serious environmental impact in the project area as well as in the surrounding areas.

- 46.** It is also to be noted that the Hon'ble Supreme Court in **Keystone Realtors Private Limited Vs. Shri Anil V Tharthare & Ors. [Civil Appeal No. 2435 of 2019]** reported in **(2020) 2 SCC 66** has held that

"The EIA Notification seeks to ensure the protection and preservation of the environment during the execution of new projects and the expansion or modernization of existing projects. It imposes restrictions on the execution of new projects and on the expansion of existing projects, until their potential environmental impact has been assessed and approved by the grant of an EC."

- 47.** It was also observed by the Hon'ble Supreme Court that

"19. In a case where the text of the provisions requires interpretation, this Court must adopt an interpretation which is in consonance with the object and purpose of the legislation or delegated legislation as a whole. The EIA Notification was adopted with the intention of restricting new projects and the expansion of new projects until their environmental impact could be evaluated and understood. It cannot be disputed that as the size of the project increases, so does the magnitude of the project's environmental impact. This Court cannot adopt an interpretation of the EIA Notification which would permit, incrementally or otherwise, project proponents to increase the construction area of a project without any oversight from the Expert Appraisal Committee or the SEAC, as applicable."

- 48.** The Hon'ble Supreme Court has also held categorically that even with respect to expansion projects, it cannot be done incrementally in a manner that will prevent the officials from examining the environmental impact and evaluating it holistically considering all the relevant factors, including air and water availability, pollution, management of solid and liquid waste and the urban carrying capacity area.

- 49.** The claim of the project proponent that the project does not require Environmental Clearance is not sustainable and having claimed the project is a new project and applied before the SEIAA – Kerala for Environmental Clearance, it is purely an afterthought to claim that they have made the application by mistake and this being 'Mixed-use and Township Project' does

not require Environmental Clearance is rejected since the 'dominant purpose' or 'dominant nature' of the project is 'Building and Construction Project'. Therefore, we hold that the project requires prior Environmental Clearance under Item 8 (a) of the EIA Notification, 2006.

- 50.** We also hold that the proceedings in the name of Administrator SEIAA is in violation of the EIA Notification. The Environmental Clearance shall be granted only by the SEIAA as proceedings of the SEIAA and at best, the Environmental Clearance can be signed by the administrator on behalf of the SEIAA. But certainly, it cannot be the proceedings of the administrator, since the EIA Notification, 2006 stipulates that the prior Environmental Clearance shall be granted by the SEIAA based on the specific recommendation of the SEAC.
- 51.** It is high time, the officers who are part of the SEIAA – Kerala are made to realize that it is their bounden duty to protect the environment as per the procedures prescribed in the EIA Notification, 2006 and the grant of Environmental Clearance cannot be left to the whimsical discretion of the members of the SEIAA.
- 52.** For the violation of commencing the project prior to securing prior Environmental Clearance, the project proponent is liable for payment of environmental compensation. Normally, the options before the Tribunal are to pull down the structure for having violated the environmental laws or impose environmental compensation which will act as a deterrent for the prospective builders from undertaking constructions without obtaining prior Environmental Clearance. Since the project is not in a very highly eco-sensitive zone (i.e. CRZ, Wetland, Water body, etc.) and is nearing completion, we feel that the ends of justice will be met by imposing appropriate environmental compensation by the Kerala State Pollution Control Board within a period of 3 (Three) months subject to the approval of this Tribunal.

53. In view of the detailed discussions made above, we

- I.** Set aside the Environmental Clearance dated 12.03.2020 granted by the SEIAA - Kerala.
- II.** The SEIAA – Kerala is directed to stop the project with immediate effect and we direct the project proponent to make an application within 2 (Two) months which shall be examined by the SEIAA or MoEF&CC, as the case may be, on merits and as per rules in force.
- III.** When the application is considered, it can be considered only after assessing the damage that might have been caused to the environment due to the construction and also assessing the mitigation / remediation measures that will have to be undertaken prior to consideration of the application. The amount required for remediation and mitigation measures shall be recovered from the Project proponent. In view of Para (52), the environmental compensation to be imposed on the Project Proponent will be considered by the Kerala SPCB appropriately within a period of 3 (Three) months which will be subject to the approval of this Tribunal.
- IV.** The environmental compensation shall be paid to the Kerala SPCB for being deposited in an interest bearing account in a Nationalized Bank and the interest shall be utilized for restoration of wetlands and removal of water hyacinths from the major waterways and water bodies of Kerala State and for utilization of the removed water hyacinth for energy generation/composting or producing a value added product.
- V.** A Committee comprising of the **(i)** Additional Chief Secretary – Department of Environment – Directorate of Environment and Climate Change (DoECC), **(ii)** Additional Chief Secretary – Irrigation Department, **(iii)** Principal Chief Conservator of Forests (Head of Forest

Force)/Chief Conservator (Wetlands), and (iv) Chairman – Kerala State Pollution Control Board headed by the Chief Secretary – State of Kerala shall consider the projects received for sanction of funds from the interest income.

VI. In view of the gross violations made out, we recommend the Secretary – MoEF&CC to initiate action after due enquiry against all the members of SEIAA who were party to the decision.

VII. In case the same members are continuing as members of SEIAA, pending enquiry all the proposals for prior Environmental Clearance may be referred to a new set of members.

VIII. The Additional Chief Secretary – Department of Environment, Directorate of Environment and Climate Change (DoECC), State of Kerala shall report compliance in 6 (Six) months to this Tribunal.

54. As a corollary, the Interlocutory Applications [I.A. Nos.194 to 196 of 2022 (SZ)] are also disposed of.

Sd/-
Smt. Justice Pushpa Sathyanarayana, JM

Sd/-
Dr. Satyagopal Korlapati, EM

Internet – Yes/No
All India NGT Reporter – Yes/No

Appeal No.05/2022 (SZ)
I.A. Nos.194 to 196/2022(SZ)
11th September 2023. Mn.

Item No.2:-**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI***(Through Video Conference)***Appeal No.05 of 2022(SZ)****IN THE MATTER OF:****Shaji A.K.**

...Appellant(s)

*With***Ministry of Environment, Forests & Climate Change**
New Delhi and Ors.

...Respondent(s)

Date of Order: 11.09.2023.**CORAM:****HON'BLE Smt. JUSTICE PUSHPA SATHYANARAYANA, JUDICIAL MEMBER****HON'BLE Dr. SATYAGOPAL KORLAPATI, EXPERT MEMBER****ORDER**

1. After pronouncing the Judgment, Mr. K.R. Harin, the learned counsel appearing for Respondent No.5 requested for the stay of the operation of the order, which this Tribunal refused. It is open to him to work out his remedy in the appropriate forum.

Sd/-**Smt. Justice Pushpa Sathyanarayana, JM****Sd/-****Dr. Satyagopal Korlapati, EM****Appeal No.05/2022 (SZ)**
11th September 2023. Mn.